Brig. Gen. Paul W. Turner, former chairman of the National Board, died Dec. 3 of pulmonary illness in Nashville, Tenn. The story on Page 3 recounts his career in the Civil Air Patrol.



CIVIL AIR PATROL NEWS

TE 10. NUMBER 1

ROBERTSON JAMES
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MAXWELL AFB, ALA. 36112

JANUARY 1978

rlift Saves Patient

ELL AFB, Ala.—The Patrol Utah Wing dited with saving of a hospital patient in wember, through an expairlift of a blood anti-

saving mission was initiated when hospital officials at Grand Junction County, Utah, notified the Utah CAP Wing that

a blood anti-coagulant was urgently needed for a hemophiliac patient.

Within minutes after receiving the call for assistance, a Utah CAP light aircraft was launched. The blood anti-coagulant was transported from Salt Lake City to St. Mary's Hospital in Grand Junction County.

A save was credited to the

Utah unit because hospital officials explained that the patient probably would not have been able to survive without the blood anti-coagulant.

This save marks the 46th person that Civil Air Patrol, which celebrated its 36th anniversary on Dec. 1, had been credited with saving last year through its emergency service operations.



CAKE CUTTING—Lt. Gen. Raymond B. Furlong, commander Air University, uses a model aircraft propeller to cut a cake at a reception honoring Civil Air Patrol's 36th anniversary Dec. 1 at National Headquarters. Brig. Gen. Thomas C. Casaday, CAP's national commander, center, and Brig. Gen. Paul E. Gardner, executive director of CAP and commander of Hq. CAP-USAF look on.

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North Dakota Cadets Aid Snowbound Cities

By CADET BRIAN K. LITTLE Fargo-Moorhead Cadet Sq.

FARGO, N.D.—It started out as a very routine day for the members of, the Fargo-Moorhead Cadet Sq. (North Dakota Wing). The cadets went to school and the commander went to work as usual.

But later that afternoon when the cadets were working on the squadron newsletter in the print shop, someone made the comment that we had timed putting up the new tower and antenna for the FM repeater just right because it looked like we might be getting snow.

Later the cadet wished he had not said that because it seemed to bring bad luck.

That evening the squadron had its regular FM net at 6:30. Some cadets started to prepare the rescue vehicles and jeeps in case the storm got worse. Communications stopped at 7:15 p.m. For some reason the repeater quit, and simplex operation was started until the problem could be found.

Ten minutes later, Maj. David Ortner, squadron commander, received a call from the Lehigh Portland Cement Company in Fargo, saying that the squadron antenna had fallen and landed on one of the buildings.

Ortner asked the communications team to report to the cement company and see what the damage was and whether the repeater could be put back on the air.

The cadets and commander arrived at the site at 7:45 p.m. We could still see our tower light, which was a big relief. At least the tower hadn't fallen.

The antenna was lying on top of one of the buildings. One team got a ladder and was going to try to get the antenna down to see how badly it was damaged.

The second team headed up the steps to the top of the building. The only steps were on the outside. The weather report had said winds were blowing at 45 m.p.h., with gusts to almost 60; and we could believe it.

On top of the building, which was 100 feet above the ground, the wind was blowing the coax from the downed antenna, and also us, all over the top of the building. It was nice to have a guard rail.

The plug was pulled on the repeater so that no more damage would result. We then headed back down to help the other cadets with the antenna.

After the antenna was taken off the top of the building and put in storage, the cadets went off to work on the rest of the squadron vehicles, because we now knew we were in for a big storm.

(See FARGO, Page 5)

Dallas Will Be Host For Next Aerospace Education Congress

MAXWELL AFB, Ala.—The 1978 National Congress on Aerospace Education, sponsored by the Civil Air Patrol, the Federal Aviation Administration and the National Aeronautics and Space Administration, will be held in Dallas, Tex., April 6, 7 and 8, 1978, at the Dallas Hilton Hotel.

Registration fee is \$35 if received prior to March 1 and \$40 after that date.

The registration fee includes admission to all the official

sessions, special hotel rates but does not pay for the room, field trip transportation and box lunch, as well as entertainment and dance at the opening socializer.

The fee does not include meals or sleeping accommodations, or transportation to and from the hotel.

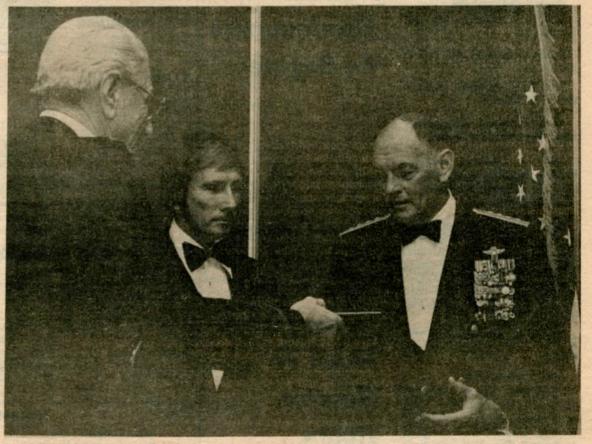
Persons may preregister by completing the Congress coupon on page 2 of this issue of the Civil Air Patrol News and sending in with check or money order payable to "National Congress on Aerospace Education" to:

National Congress on Aerospace Education CAP National Head-

quarters/ED Maxwell AFB, Ala. 36112

Hotel reservations may be made in advance by completing the hotel coupon on page 2 and sending it directly to the Dallas Hilton Hotel. Rates quoted are for congress delegates only.

(See AEROSPACE, Page 2)



LIFETIME MEMBER—Astronaut James Irwin, center, receives a lifetime membership in the Civil Air Patrol at a meeting of the Retired Officers Association in Colorado Springs. The award was made by Air Force Gen. George S. Brown, right, chairman of the Joint Chiefs of Staff, and Col. Leo H. Wells of CAP. Active in CAP affairs, Irwin was the lunar module pilot on the Apollo 15 moon mission in 1971. (USAF Photo)



SPAATZ AWARD-Reina Ido Paniagua, Secretary of State for Puerto Rico (center), congratulates Cadet Richard Correa of the Caguas High School Cadet Sq. (Pureto Rico Wing) for having earned Civil Air Patrol's highest award, the Gen. Carl A. Spaatz Award. Looking on at the ceremony, held in the governor's office, are Correa's patents Mr. and Mrs. Richard Correa (left), Maj. Hilda Malave, commander Caguas High School Cadet Sq., and Col. Rodolfo Criscuolo, commander of the Puerto Rico Wing.

Cadet's Fast Action Saves Hunter's Life

STARKVILLE Miss.-Quick action by Cadet David Pettry, Golden Triangle Comp. Sq. (Mississippi Wing) was instrumental in the treatment that led to complete recovery of a wounded hunter, according to Cadet Melissa Westmoreland, squadron information officer.

The hunter, a young man about 25 years old, was shot by an inexperienced boy hunter who had become separated from his

Pettry, who was hunting near Houston, Miss., had just had a hit and was watching his bird

His attention was momentarily distracted as the man emerged from the cover of trees where he had gone to recover a bird.

Pettry looked back at his bird and saw that the boy was aiming at it and would probably hit the

Pettry tried to warm him to stop but it was all happening tooquickly. The bird had fallen to eye level and the boy fired.

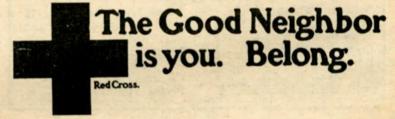
Just as Pettry had feared, the man was hit. His left arm and shoulder were drenched with

Without hesitation, Pettry ran to him and laid the man on the ground, with his feet propped on an ammunition box.

He then cut off his shirt and checked his pulse and breathing. He also looked to see if the jugular vein had been cut.

By this time someone had brought a pickup. Pettry instucted other hunters there how to execute a six-man carry and place the wounded man into the back of the pickup.

Pettry rode with the man in the back of the truck to the Houston hospital. At the hospital, an orderly met them and the patient was taken directly into surgery, where 150 pieces of shot were removed from his arm and chest, 65 of which were centered around the heart.



Aerospace Congress Will Meet In Dallas

(Continued From Page 1)

Hotel rooms will be filled on a first-come, first-served basis. All reservations must reach the hotel by March 15. The hotel will confirm reservations my mail upon receipt of the reservation coupon.

The rates are:

Single occupancy: \$26

Double occupancy: \$34 (\$17 per person)

Triple Occupancy \$41 (\$13.66 per person)

The basic congress schedule will be as follows:

April 5: Arrival, registration, hotel check-in and reception.

April 6: Opening session, keynote address, mini sessions and the evening socializer -"Baron's Bash."

April 7: Leadership activities in the morning and evening field trip to the American Airlines Flight Academy and Learning Center. An alternate trip will be provided for those who have already visited the American Airlines facility

April 8: Heritage Segment, Hall of Honor and closing session.

April 9: Departure.

There will be an additional Mini Congress for 500 professional educators selected from the Dallas-Fort Worth area on April 7. The Mini Congress is designed to provide them with a meaningful, motivational and comprehensive glimpse into the aerospace world.

Congress Coupon

Send To CAP National **Headquarters** To Register

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If a room is not available at rate requested, reservation will be made at next available rate. Reservation will not be held after 6 p.m. unless hotel is notified of your exact arrival

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REGISTRATION FEES - CHECK SELECTION

Basic Congress Registration Fee if mailed before 3/1/78 Basic Congress Registration Fee if mailed after 3/1/78

\$35.00 \$40.00

ENCLOSE CHECK OR MONEY ORDER FOR REGISTRATION FEE ONLY, YOU WILL PAY THE HOTEL FOR YOUR ROOM ACCOMMODATIONS.

In Memoriam

Gen. Paul W. Turner, Former Chairman, Dies

NASHVILLE, Tenn.—CAP Brig. Gen. Paul W. Turner, a charter member of Civil Air Patrol and a former Chairman of the National Board, died Saturday, Dec. 3, in a Nashville hospital where he had been hospitalized since Oct. 26 for a pulmonary illness.

Gen. Turner, better known among his Civil Air Patrol friends as "Pappy," served as National Board Chairman from Sept. 9, 1962, to Oct. 26, 1965.

After leaving that office, he became National Finance Officer and served until 1973 in that post. In 1973, he became National Controller and held that office up until the time of his death.

The last national-level conference Gen. Turner attended was the annual meeting of the National Board Oct. 21-22 in Atlanta, Ga. He was hospitalized soon after that.

Gen. Turner joined Civil Air Patrol in 1941 soon after it was organized. During the early days, he was involved in CAP's courier and ferry service, and flew many missions on search and rescue. He also taught navigation, the theory of flight, and other ground school subjects. During the war, he established and directed a Civil Air Patrol ground school for fixed-base operations in middle Tennessee.

Over the years, he held practically every position in Civil Air Patrol from squadron commander on up. Prior to being elected Chairman of the National Board, he represented the Southeast Region on the board and then served as Vice Chairman of the National Board.

In addition, he had served in the past as chairman of the Constitution and By-laws Committee, as a member of the National Finance Committee, as a member of the National Drill Exhibition Committee, as a member of the National Commander's Long-range Planning Committee, as a member of the Insurance Committee, and as a chairman of the Publications Committee.

Since 1968, he had sponsored the Turner Safety Award which annually recognizes the CAP wing with the best safety record for the year.

During the 1972 meeting of the National Board in Dallas, Tex., Gen. Turner was inducted into Civil Air Patrol's Hall of Honor in an impressive ceremony. He was one of the first 10 persons to be so recognized.

The Hall of Honor pays tribute to those who were instrumental in organizing Civil Air Patrol or who have made a significant and lasting contribution to its development over the years. Bronze plaques of all Hall of Honor recipients are on display in the Air Force Museum at Wright-Patterson AFB, Ohio.

The veteran CAP official was born April 28, 1905, in Waverly, Tenn. The

following year, his family moved to Nashville and he had lived there ever

He attended Nashville elementary schools and Montgomery Bell Academy as well as Fitzgerald and Clark Military Academy. Later, he did special work at the University of Tennessee.

He entered the insurance business in 1928 and was so engaged at the time of his death. He was a member of the firm of Turner-Weaver and Co. of Nashville.

Gen. Turner began flying in 1927 with the 105th Observation Sq., a unit of the Tennessee National Guard which helped build Nashville's first airfield. In 1936, he won the Tennessee Bureau of Aeronautics Flight Scholarship Award and received his private pilot license. He later earned a commercial license and accrued many thousands of hours flying time.

He was a member of St. George's Episcopal Church in Nashville. He was also a 32nd degree Mason, a member of the Corinthian Lodge: a Shriner and a member of the Potentate's Guard. He was a member of the Nashville Kiwanis Club, the Nashville Chamber of Commerce where he served as a member of the Aviation Committee, and the Richland Gold and Country Club of Nashville. He was a past president of the Nashville Insurance Exchange, was on the board of directors of the American Ordnance Association, and was a former Key Man of Nashville Hangar QB Club. His hobbies included photography and woodworking.

He is survived by his widow, the former Elizabeth B. "Betsy" Gebhart; three daughers; and a number of grandchildren. Funeral services were held Tuesday, Dec. 6, in Nashville with interment following in that city.

A large number of Civil Air Patrol officials and members attended the services. Among them were Brig. Gen. Thomas C. Casaday, the National Commander; Col. Oscar K. Jolley, the National Vice Commander; Brig. Gens. William C. Whelen, Lyle W. Castle, and S. H. duPont Jr., all former Chairmen of the National Board; and Gordon T. Weir, National Administrator. Air Force Brig. Gen. Paul E. Gardner, CAP Executive Director, represented the Air Force.

At the time Gen. Turner served as Chairman of the National Board, the position, as it does today, represented the highest level of corporate authority. It carried the rank of colonel. Later, the rank for this position was upgraded to brigadier general and all past National Board Chairmen were elevated to this rank.

Since September 1975, the top-level corporate official has been designated the National Commander. The Air Force officer who helps direct Civil Air Patrol affairs at National Headquarters, formerly known as the National Commander, was designated the Executive Director at that time.



National Commander's Comments

Plan Now For Staff Colleges

By THOMAS C. CASADAY Brigadier General, CAP **National Commander**

Most of you who have been in the Civil Air Patrol for a number of years are familiar with the excellent summer activities available to both senior and cadet members.

Whether it be the National Staff College or Cadet Officer

School at Maxwell AFB, Ala., or a Region Staff College or cadet encampment at any number of locations throughout the country, these activities afford training that enhances



not only our potential for progress in the CAP program, but in our personal and professional lives as well.

The one asset that any progressive organization must possess is strong, effective leadership; and the development of leadership qualities in the CAP membership is the primary goal of these activities. I urge commanders and cadet and senior program officers at all echelons to promote and support these activities to the fullest extent.

Present and potential commanders and staff personnel should be identified and encouraged to attend the National Staff College (NSC) or the Region Staff College (RSC) in

their region. Those members who have been identified to serve at wing or region level in particular should attend the NSC, which has developed as the graduate-level school in the senior training program.

Commanders and cadet program officers should seek out our deserving cadets and provide all assistance possible to get them to those activities for which they qualify.

I suggest, incidentally, that if you are a senior member or cadet who is interested in these activities, ask your commander or senior or cadet program officer how to apply.

It may seem strange that I would be pushing these summer activities during the dead of winter, but the fact is that application procedures must begin now in order to assure acceptance. If the lead time seems inordinately long, keep in mind that facilities, staff and, in many cases, airlift must be procured long in advance of the activity start date.

The cadet activity listing is printed in this issue of the Civil Air Patrol News. The senior listing will appear next month. I believe that every CAP member can find activities that will benefit him or her personally These professionally. programs are not training only for training's sake, but offer tremendous potential for individual development.

Blacks Made Many Contributions To Nation

February is Black History Month. In the United States a variety of events are planned each year in recognition of the contributions made to the nation by its black citizens

In the Air Force, in addition to the service-wide celebration of Black History Month, one week in February is often set apart as Black History Week at the various bases in which local events are scheduled for the base community.

The idea of having a special month set aside in commemoration of Black History in which members of all races could take part was conceived several years ago as a consciousnessraising event, partly to make all citizens aware of the contributions of black Americans to the nation's development.

Blacks have played no small role in the history of the New World, but in many instances their contributions have not been generally known.

Thus the people and milestones of Black-American History were largely ignored by the national school system, so that whole generations of Americans grew up without having the slightest conception of the magnitude of the part Black Americans played in their history.

Black History doesn't begin in the New World. There were many highly advanced black cultures in the ancient and medieval periods. They were in contact with the classical and Arabic civilizations and made numerous contributions to European civilization.

Paintings from ancient Egypt show many blacks. Some of the most powerful of the Egyptian kings had black wives. In the Song of Solomon, the wife of the Israelite king Solomon, who was an Egyptian princess, is described as a black woman. At one time a black dynasty from the Sudan conquered Egypt. This is the subject of the opera "Aida."

Meroe, a black kingdom south of Egypt continued the Egyptian civilization after the decline of Egypt itself, event building pyramids.

The Greek historian. Herodotus, wrote of a city populated by blacks on the eastern shore of the Black sea named Colchis. That was one of the stops made by the Jason of Greek legend and the Argonauts when they were searching for the golden fleece. Jason's wife, Medea, was a Colchian.

Many blacks held important positions in the Greco-Roman world. It is believed that such notables of ancient literature as Aesop and Terentius were black. A black Roman army commander, Lusius Quietus, became governor of Judea at the height of Roman imperial expansion.

Archaeological finds from ancient America indicate that blacks were among the other groups which preceded Columbus. The first known black to reach America was Pedro Alonzo, Nino pilot of one of Columbus's ships on his first voyage.

Although the Spanish used black and Indian slaves in mining and agricultural work, many blacks that traveled with them were free. There were several blacks with Balboa in Panama and with De Soto in Mississippione of whom became the second settler in Alabama. Others were with the founding party at St. Augustine, Fla.

The English imported blacks as slave labor. The first ship brought slaves to James Va., in 1619, the same year that the first ship of English women arrived as wives for the colonists. The first slaves arrived in New England in 1638. They worked along side indentured white persons as house servants and grooms.

Massachusetts became the first colony to legalize slavery in 1641. From then on the institution of slavery was formalized. Laws were passed confirming that the children of slaves were

born into slavery, that intermarriage between the races was prohibited, and that conversion to Christianity did not alter the slaves' status

The situation remained unchanged up to the American Revolution. Revolutionary leaders were generally opposed to slavery but did not want to risk alienating large segments of the white population during the war. Benjamin Frnaklin was president of an abolitionist society in Pennsylvania.

Blacks had a role in the war from the Boston Massacre and Bunker Hill to the end. Several thousand blacks served in the war and were given their freedom. The New England states were the first to outlaw slavery during and after the war, beginning with Vermont.

At the end of the war out of a population of four million, nearly 19 per cent was black. Many of these rose to prominent

positions in medicine, law, literature, education, music and religion from the very first. Several thousand blacks were themselves slave owners in the South.

After the Civil War, when slavery was abolished in the entire country, blacks faced a century-long struggle before they gained complete acceptance as fellow citizens from other Americans.

During that time they continued to make gains in the professional fields. There were so many successful blacks that they cannot be considered exceptions, as they have been for so long. However, their attainments were not generally known.

Now however, largely through the efforts of departments of black studies at universities, their accomplishments are becoming known. Black History Month is a part of that effort.



From 1900 through 1925, motor vehicle deaths totaled 2.1 million, according to the National Safety News.



National CommanderBrig. Gen. Thomas C. Casaday, CAP Director of InformationLt. Col. Herbert A. Babb, USAF EditorTSgt. Hugh Borg, USAF

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JANUARY 1978

Fargo Cadets Brave Storm

(Continued From Page 1)

The night was quiet for the ground teams but the radios were full of traffic.

The squadron net monitored CB channel 9 for persons in need of help. He also monitored weather reports, which at this time saw no end in sight for the storm.

The following day everything in the Fargo-Moorhead area was at a standstill. All schools were closed and most businesses. The snow was so bad and heavy that the street departments had to take all their plows off the roads because they were getting stuck.

The ground teams slowly worked their way to people stranded in cars that could be heard calling for help on the CB. But there were many that had no way to communicate with the outside.

A number of vehicles were found stalled, and the passengers were hauled to safety where they could wait out the storm

Centers were set up in the area for people from out of town that got caught by the storm.

Many persons also had to leave their homes because they had no heat or lights, for power lines were falling from the weight of the snow and ice.

The radios and ground teams were busy all that day and night. By nightfall you could see that the many hours of work were starting to take their toll of the squadron members. But cold and hungry, they kept on working.

The following day most of the cities were still at a standstill. The weather reports said that this had been the worst storm ever recorded for that time of year in our area.

By that night you could see some movement in the cities. Power was still out in many sections but the repair crews were working.

The squadron vehicles and radios had one of the biggest and toughest workouts that they had ever had.

After the storm, work began on repairing the squadron repeater. We hoped that part of the antenna could be saved and that the repair cost wouldn't be more than we could afford.

Two persons are known to have lost their lives because of the storm and Minnesota Wing was still looking for two lost hunters at the time of writing.

But we of the Fargo-Moorhead Cadet Sq. will not likely forget the storm and the lessons learned from it.



TV INTERVIEW—Civil Air Patrol emergency assistance to the cities of Fargo, N.D., and Moorehead, Minn., during a recent blizzard was a topic of conversation when three members of the Fargo-Moorehead Cadet Sq. (North Dakota Wing) appeared on the afternoon talk show Panorama on KXJB-TV in Fargo. From left, they are Cadet Jeff Nansen, Cadet Brian Little and Maj. David Ortner, squadron commander, with show hostess Sally Hillaboe. (KXJB-TV Photo by Dennis Gad)

CAP Joins Ground Search

SCRANTON, Pa.—Members of the Scranton Comp. Sq. 201 (Pennsylvania Wing) were called out on a four-day search recently to look for a 78-year-old woman who became separated from her husband while the two were picking mushrooms.

Other volunteers and the local police had searched the area before the CAP was called.

In addition to the Scranton addition to the Scranton squadron, the Carbondale Comp. Sq. 204 and units from Group 80 in the Allentown area arrived to take part in the search. Approximately 90 CAP people were included.

The area involved in the search was heavily wooded, with strip mines, small creeks and a reservoir. This required that ground search teams do the actual searching.

A Pennsylvania State Police helicopter was used on the second day of the search, but was unsuccessful because of the nature of the terrain. The woman had disappeared several days previously before an electrical storm that had high winds, rain and low temperatures that turned the rain to snow.

The search was also hampered by adverse weather conditions. In spite of pouring rain and unseasonably cold temperatures, the search continued.

Bloodhounds were brought in on two occassions and both times they tracked the missing woman to the edge of a bridge spanning the reservoir, but refused to cross it.

This led some to believe that the woman had fallen into the water and was carried down stream.

That seemed unlikely, however, because rescue workers felt her mushroom basket, her walking stick or even a few spilled mushrooms should have been found near the water's edge.

The State Police scuba dive team was called in to drag the reservoir, but turned up no trace of the missing woman. On the third day of the search, the commander of Group 20 contacted from Scott AFB, Ill., to request assistance of air sniffer dogs of the American Rescue Dog Association.

These dogs are trained to trace human scent in the air, not on the ground like blood hounds or other tracking dogs. There are only 17 such dogs in the country.

Three dogs and seven handlers were flown in from the New York area that night. The dogs began searching the next morning.

A few hours later they found the body of the woman about one and a half miles from where she was last seen, in four feet of water in a runoff from one of the creeks. All that was visible was her hat and one shoulder.

Maj. William Mathias, mission coordinator, said she would not have been found if it wasn't for the help of the dogs because her clothing blended in perfectly with the surroundings.

Radiation Monitors Test For Real Thing

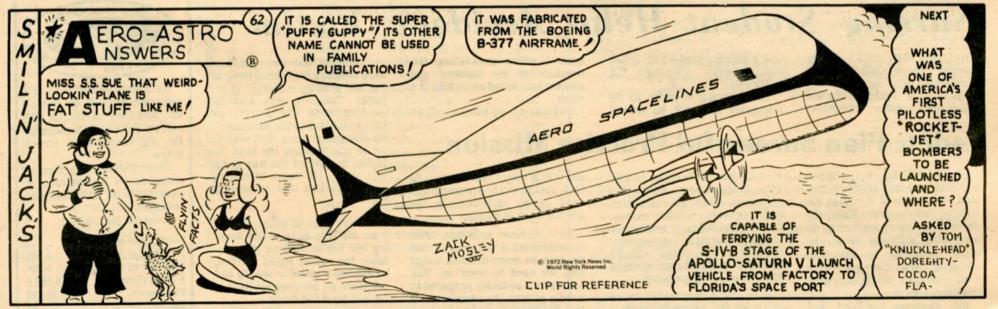
WARWICK, R.I.—The Rhode Island Wing's participation in a recent civil defense exercise had an added touch of realism.

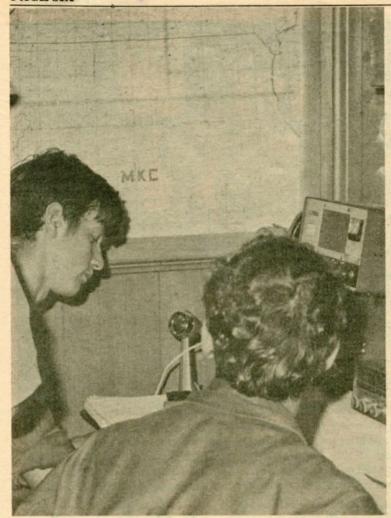
A simulated radiation monitoring mission turned into a chance to monitor debris from a Communist Chinese nuclear test that swept eastward over the state.

As newspapers reported that the debris from the Chinese test explosion had been blown toward the Atlantic faster than expected, 50 CAP members took samples from 37 monitoring stations.

Civil Defense personnel were sent to instruct the CAP participants in the use of survey meters, dosimeters and chargers.

Films on the subject were also shown. Additionally, home study courses were made available to the CAP personnel.





MISSION COMMUNICATOR-Cadet Mike Kempton, Red Oak Optimist Comp. Sq. (Iowa Wing), handled radio messages during a recent state-wide search and rescue exercise held by the wing at the Red Oak Municipal Airport. (Photo by Capt. Jim Black).

Iowans Find Four Targets

RED OAK, Iowa—The Red Oak Optimist Comp. Sq. (Iowa Wing) was host for a recent statewide practice search and rescue mission.

More than 100 Civil Air Patrol members from all parts of Iowa participated in the mission, which was based at the newly remodeled C.O. Betsinger Search and Rescue Center at the municipal airport. The National Guard Armory was also used for billeting, messing and training during the weekend exercise.

The mission was activated at 9 a.m. on a Saturday. Capt. Don Bailey of Ames, Iowa, mission coordinator, spent the morning hours briefing all personnel.

A total of nine aircraft were employed on the mission. Also five vehicles were used for ground support.

The first search aircraft was dispatched at 10:30 a.m. Although the mission was a practice exercise, every attempt was made to provide realism. Problems were thought out before hand. Clues and information lent further reality to the ex-

As the mission developed, clues were called in by persons who had heard or seen aircraft acting suspiciously. Information was also gathered by radio and ground team interrogation.

The information was relayed to the mission coordinator and

air operations officer for evaluation. Then the aircrews were briefed and assigned search grids. At the same time, ground teams were sent to areas where they could be quickly routed to the crash sites.

Information on the various aspects of the flights, including pilots, passengers, aircraft description and flight coor-dinates were pieced together and search planes dispatched to the location involved.

After the targets were located, aircrews directed the ground teams to the exact locations.

During the weekend exercise, a total of five simulated aircraft accidents were reported. Four of them were located.

Active duty Air Force personnel were present to evaluate the overall mission effectiveness and monitor the performance of key staff members. The evaluators said they were impressed with the new search and rescue facility and had only a few suggestions for improvements.



FIRST AID-2nd Lt. Pat Kruzensk (right) and Cadet Radger Tabor of the Grayson County Comp. Sq. (Texas Wing) administer first aid to an accident victim at a first aid station the squadron set up at Lake Texoma near the Oklahoma line at the request of the U.S. Army Corps of Engineers. During the summer CAP personnel were credited with a save when a small boat foundered They got a boat and rescued the occupants of the sinking craft.

CAP Uniform Board Makes Changes In Cadet Apparel

MAXWELL AFB, Ala. - The National Uniform Committee considered several items of business at its meeting here at National Headquarters on Dec. 2. The most significant change was approval for cadets to wear the new long sleeve epaulet shirt as an optional uniform (Combination 2).

Cadet airmen will wear the shirt with the CAP cutout on the left collar and metal chevron on the right. Cadet officers will wear it with a new cloth shoulder mark insignia (not to be confused with the cadet officer shoulder boards).

This new cloth insignia will also be authorized for female cadets to be worn on the new version of the overblouse with epaulets.

The same badges and devices are worn with this shirt as are worn on the short-sleeve blue shirt, i.e., identification badge, wing patch, etc.

The Committee also approved the wear of shoulder boards for cadet warrant officers.

The Committee approved the senior member identification badge for cadets when the current stock of cadet identification badges is depleted by the Bookstore. During the transition period, either badge may be

The Committee confirmed the policy whereby cadets enrolled in both CAP and AFJROTC may wear the same uniform for both activities with the AFJROTC patch on the left sleeve and the CAP wing patch on the right

A proposal to authorize a ribbon for the Cadet Officer School was disapproved in keeping with the Committee's policy of a clean-line, uncluttered un-

All of the above changes will be forthcoming in a change to CAPM 39-1. The effective date for Combination 2 and shoulder boards for warrant officers is Jan. 15 (or when the new cloth cadet insignia becomes available in the Bookstore).

CUT WINTER DRIVING IN HALF ...



Nursing Student Helps Accident Victim

BALTIMORE, Md.-Senior Member Larry Cohen of the Northwest Comp. Sq. (Maryland Wing) is a state licensed emergency medical technician

and a nursing student at Essex Community College in Baltimore.

One morning recently as he was going to school, he noticed

several police cars along the shoulder of the highway and another car, tilted on its side in a

Cohen stopped to offer

Cadets Plan Successful Practice Mission

CHARLOTTE, N.C.-When planning a recent practice mission, the cadets of the 111th Air Rescue and Recovery Cadet Sq. decided that they wanted to do something different from the usual rappelling or mountain climbing. What they got was a well planned multi-targeted practice mission.

The exercise involved just about every aspect of a real mission. Cadets got training in mission coordination, emergency communications, ground search and recovery, scuba rescue, radiological defense, emergency vehicle operation, emergency locator transmitter (ELT) tracking, crash site surveillance and ground team operation.

It is nearly impossible to involve all the above things in a simulated mission, but the 111th

did it in a very realistic way. In fact, real aircraft wreckage was used as an objective for the ground team to locate.

The entire mission ran smoothly, but it did show us that we do have some definite things that we need to work on. The squadron is probably prepared to handle almost any situation, and this exercise showed us that we assistance. The two victims were bleeding from head wounds and had possibly suffered leg injuries. Someone was already working with the driver, so Larry attended to the passenger. He always carries a first aid kit. As he was treating the head injuries, he noticed she was going into shock. He began talking to her, conforting and reassuring

He was able to extricate her from the wreckage, while keeping her leg as still as possible. After the rescue squad arrived, he applied a splint to the leg and prepared an intravenous fluid to further treat the shock.

The victims are recovering.



For the benefit of all members of Civil Air Patrol, the statistics of search and rescue activities throughout the organization are shown below.

These are unofficial figures compiled by Directorate of Operations at CAP National Headquarters.

As of Dec. 4, 1977

Number of Missions	750
Number of Aircraft	
Number of Sorties	8,626
Flying Hours	.16,168.0
Personnel	23,198
Saves	48
Finds	416

TIN BOARD

etin Cont'd



approximately three weeks is normally required to process a request through HQ USAF and

VON, FTS, WATS. Indications have been received at this headquarters that AUTOVON, ircuits are being used by CAP personnel for the conduct of CAP business. In accordance over listed telephone services are only for official USAF business by authorized personnel, one for other reasons is illegal and subject to financial liability.

DOK

DRON COMMANDERS. The 1978 CAP Pamphlet 50-1 has been distributed to the field and places of national significance. Page 77 of that document should be further updated

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NCR Conference GLR Conference Eastern Staff College SER Conference PACR Conference Cedar Rapids, Iowa Dayton, Ohio Roanoke, Virginia Biloxi, Mississippi Portland, Oregon

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CAP PUBLICATIONS:

signment and Duty Status," 9 December 1977, supersedes CAPR 35-1, 20 January 1967.

PM 39-2, "Civil Air Patrol Membership," 9 December 1977, has been published.

50-1, "Extension Course Institute (ECI)," 9 December 1977, has been published.

mmander's Guide," January 1978, supersedes CAPP 50-1, January 1977.

Level II Specialty Track-Study Guide for Plans and Programs Officer," 9 December 1977, agust 1972.

Level II Specialty Track-Study Guide for Supply Officer," 9 December 1977, supersedes

19a, "Senior Member Training, Level I Comprehensive Review," and the answer sheet have been published.

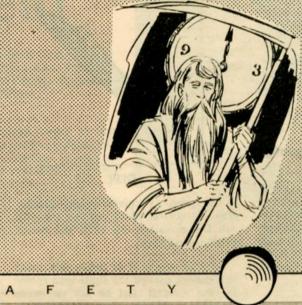
et Evaluation for the Leadership Laboratory," December 1977, has been published. DAP

DIRECTOR

t Col, USAF

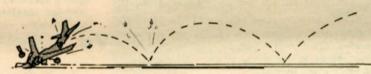
U. S. AIR FORCE -- THE AEROSPACE TEAM





One, if not THE, most ego-related maneuvers in a pilot's repertoire is the LAND-ING. The following article was borrowed from "Flight Safety," HQ ATC Randolph AFB, Texas. It is worthy of reading and heeding with due consideration as to who

flies the aircraft at times, the pilot, or his ego.



LANDING PROBLEMS

A recent Aero Club mishap review from another command is notable primarily because it sounds so familiar. The student pilot's approach was normal until the flare. He flared the T-41 high, ballooned, and immediately lowered the nose. The aircraft descended rapidly, contacted the runway nosewheel first, and bounced twice. Full-up elevator and power were added. The aircraft then made a three-point touchdown, at which time the student pilot retarded the power and completed the landing. The nose-gear and fire wall were damaged.

The most frequent way pilots damage this type aircraft is during landing when the pilot bounces, balloons, or porpoises and takes improper corrective actions. This mishap report does not mention whether or not the aircraft actually porpoised; however, the description of the nosewheel first touchdown and subsequent bouncing seems to describe what is commonly known as "porpoise." The proper corrective action for this problem involves positioning the yoke neutral or slightly aft to establish the normal landing attitude and adding power in order to accomplish a go-around. If you do try to counteract each upward and downward movement of the nose, your reaction time will put you far enough behind the aircraft's movements to cause your inputs to magnify the problem.

Many porpoises will result from a bounce or balloon if the pilot attempts to put the aircraft on the runway. If the bounce is only slight, i.e., the aircraft is just slightly above the runway, you are not about to stall, and the pitch attitude is not excessive, the best corrective action is to maintain landing attitude and allow the aircraft to settle back to the runway. If the bounce is severe, causes a high nose-up attitude, or the aircraft is near a stall, then the proper corrective action is to go around. By holding the landing attitude and adding power for a go-around, you will prevent a porpoise. It is possible that the aircraft may still touch the ground a second time before reaching flying speed, but the second touch should be on the main gear with the aircraft under control. If a balloon is encountered, the corrective action is basically the same. Again, the distance above the runway, pitch attitude, and airspeed must be considered when deciding whether to continue the landing or go around.

Whether a bounce, balloon, or porpoise is encountered, the best solution is a goaround wherein the pilot carefully controls the aircraft's pitch attitude and slowly applies power. A very slight bounce or balloon will not lead to problems if the pilot doesn't overreact. In any case, when in doubt—go around.

Let's Talk About Speed Symbols

Editor's note: This article was originally printed in the July 1975 issue of the Civil Air Patrol News.

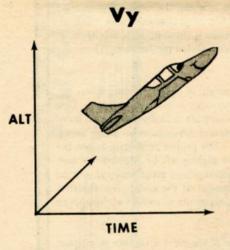
By COL. RICHARD BIFULCO

If there is one thing that can drive the average pilot up a wall, it is the technical aspects of flying. Each year we are hammered more and more with all sorts of information; some of which takes concerted effort to learn. The primary purpose of this information is to make us more knowledgeable and consequently, safer pilots.

Unfortunately, many pilots take a glance at some of these hieroglyphics, and decide that it is information they can get along without. However, the accident statistics prove differently, and only God knows how many lives would have been spared, if the pilot had been more knowledgeable.

In bygone years both flying and instructing were much simpler because we were not regulated to the extent we are now, but aviation has grown a lot and we must grow with it, if we are to fly safely. This means knowing as much as we can about the realm in which we are flying, the equipment we are flying and our own capability to handle both.

The following is an attempt to give you the most simplistic, comprehensive understanding of the more often used speed symbols. Through the years I have refined them somewhat, and I expect I may continue to do so, as I plagiarize thoughts from books and other airmen.



VY

Best rate of climb speed. This speed will give you the best altitude gain for a given period of time. You use this speed in getting up to cruise altitude and for best engine cooling in a climb. In some aircraft, it may give you a blind spot over the nose, so it is wise in terminal areas to be extremely vigilant.

VX

Best angle of climb speed. This speed will give you the greatest gain in altitude for a given horizontal distance. You would use this speed to clear an obstacle, and once this is safely done, go to Vy. The simplest way to remember the difference between Vx and Vy is to remember that Vx has more angles than Vy. Hence Vx is the best angle of climb.

VA

This is the manuvering speed. It is the speed that is normally used to fly in turlent air. Technically, it can be defined ALT DIST

as the speed, at a given weight (usually gross weight) at which you can abruptly pull the elevators full back and do no structural damage.

In other words at or below this speed you cannot exceed the limit load factor for the aircraft. Let us say you were foolishly caught in severe turbulance, in an aircraft rated for the normal category limit load of 3.8 Gs, and encourntered a gust that imposed a high load on the wings, the wing would stall when the load reached 3.8 Gs and supposedly no structural damage will be done.

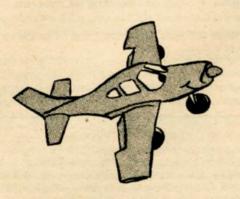
I said supposedly.





The point to remember here is that the speed Va is for only one weight configuration: gross weight. Lighter than gross aircraft should be flown slightly slower than Va because they are subjected to higher acceleration and displacement loads in turbulent air than heavier aircraft. You want to compensate for this by reducing speed slightly as the aircraft becomes lighter.



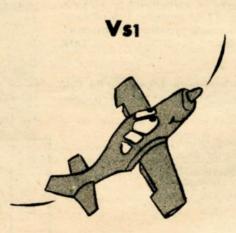


VSO

Power off stalling speed in the landing configuration. All we mean by this is that the power is off and the gear and flaps are down.

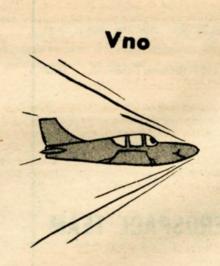
VSI

Stalling speed in any specified configuration. By this we mean the various speeds at which the aircraft will stall with power off and flaps down, or vice versa, or out of a turn, or out of a glide, etc. These stall speeds, of course, vary one from the other.



VNO

Maximum structural cruising speed. This speed is the limit of the green arc on the airspeed indicator and is the speed in which the aircraft can be flown safely in smooth air. Flight at this airspeed in turbulent air could result in structural failure.



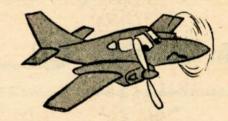
VNE

Never exceed speed. This is the red line speed on the airspeed indicator, and any speed beyond this will probably result in some structural failure. Obviously, not only do you never want to exceed it, but it is prudent not even to get near it.

Vne



Vmc



For Multi-Engine Aircraft, specifically light twins.

VMC

This is the minimum airspeed at which you can expect to control your aircraft if you suddenly lost one engine and the other engine was producing takeoff power. By control, it is meant that you are able to stop the roll into the dead engine with rudder, while losing no more than 20 degrees from your original heading.

At this speed, the aircraft may not climb, nor necessarily even hold altitude, especially if the density altitude is against you. Certainly, lift off should never be attempted before Vmc plus 5 m.p.h., unless a more critical problem is present.

Vx (Se) -

Best angle of climb speed with one engine out, and the other producing full power.

Vy (Se) -

Best rate of climb speed with one engine out, and the other producing full power.

1.3 Vso -

This is the over the fence speed corrected for instrument error due to the changed angle of attack of the pitot tube.

The aircraft manual lists the corrected speed for various configurations and this is the figure you use to arrive at 1.3 Vso.

For instance, if the manual gives Vso as 60 m.p.h., the 1.3 Vso is computed as 60 + 30 per cent — 78 m.p.h.

I realize that the foregoing is very basic stuff, and we should all know it, but it has been my experience after conducting numerous check flights that many pilots are confused about these symbols.

Obviously it is difficult to commit these symbols and their numerical counterparts to memory, especially if you are current in a number of aircraft. The easiest solution to this is to write them down on your personal checklist and review them before each flight. In no time at all and with little effort, you will be able to recall all of them; and this is bound to make you a safer pilot.

After all, we all agree that Safety is the name of the game.

Don't we?





CADET SPECIAL ACTIVITIES Application and Selection

The 1978 Cadet Special Activities have been developed to provide incentive programs for qualified cadets. In addition to the cadets, senior members are afforded an opportunity to act as escorts. This brochure is directive and all requirements must be fulfilled by the cadet and the commander as listed.

CADET SPECIAL ACTIVITIES:

- 1. The cadet special activity program was established as a motivational force to encourage greater participation in the cadet program. Selection for any one of the cadet special activities is a reward for having attained achievement and advancement.
- 2. Special activities broaden the scope of thinking and experience of each cadet selectee. In fact, certain activities contribute directly to the cadet's knowledge of career opportunities, not only in the Air Force, but also in civilian aerospace career fields. Participation in this most active program can be a high point of a cadet's life and contribute immeasurably to the formulation of life goals and ambitions.
- 3. Many cadet activities have been established and are controlled and conducted at squadron, wing, and region level. This pamphlet describes only those activities sponsored by National Headquarters.

TRANSPORTATION FOR CAP PARTICIPANTS ATTENDING CADET SPECIAL ACTIVITIES. Wing commanders are responsible for preparing and distributing travel authorizations, properly authenticated by the wing liaison officer, which indicate points of departure and destination for all special activities. Exceptions: The IACE and those cadets and senior members who require MAC air transportation to attend a national activity (Alaska, Hawaii, Puerto Rico). These orders will be published and distributed by Headquarters CAP-USAF. Due to the coordination and time involved in publishing and distributing orders, no alternate will be accepted after 30 days prior to the starting date of an activity for which Headquarters CAP-USAF is responsible for publishing the orders.

CADET APPLICATION PROCEDURES:

- 1. For all activities except IACE cadets will apply on CAPF 31, dated June 1974. Each qualified cadet must complete two copies of the form, Sections I and IV, and have parent complete Section V of the application in addition to the applicant's signature. He must submit one copy to his squadron commander by 15 February. The squadron commander will complete Section II and forward all applications to the wing. The remaining copy must be retained by the cadet for presentation at the activity should he be selected to participate. This is the only paperwork required of the cadet to make application for a special activity.
- 2. Before applying, the cadet should check the qualifications and entrance requirements for the selected activities, as listed in this brochure.
- a. Current CAP cadet/STP membership at time of application, selection, and during the activity.
 - b. Proper sex.

Company of the

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- c. Required minimum age by 1 July in the year in which the activity is held.
- d. Minimum required achievement level by 31 December 1977. (Completed Lindbergh, Goddard, or Operations Officer Achievement contracts, when required, must be dated and post-marked on or before 31 December 1977.)
- 3. For IACE, comply with procedures in CAPM 50-16 and special instructions to be dispatched by National Headquarters/ TTHS to all units and Earhart cadets.

THE CADET SELECTION PROCESS. For all activities except IACE squadron commanders will forward all CAP Forms 31 submitted to them (with Sections I, II, IV, and V completed) to wing selection boards by 15 February 1978. Wing selection proceedings may require a personal interview with cadets who apply since selection factors include military bearing, appearance, attitude, general knowledge, and interest in the activity. Requirements will not be waived, and cadets with the highest earned grade will be considered first. After selections are made, the wing commander will verify qualifications of all selectees with the respective squadrons, then submit CAPF 7 (original copy) of primary selectees and alternates by courses listed in this brochure to National Headquarters/TTHS by 20 March 1978, with a copy to the region commander, region liaison office, and wing liaison office. Rosters will include Charter Number, CAPSN (SSAN), course, primary, alternate, sex, name (list name, first name, middle initial), and complete address with ZIP code. Applications will remain with the wing to be used in the event that wing quota changes occur. (Reallocation of unfilled quotas will not be made by wing/region without National Headquarters approval.) The wing commander will also notify each cadet of his/her selection status by 1 April 1978. Physical examinations should be arranged at this time.



CADET SPECIAL ACTIVITIES





INTERNATIONAL AIR CADET EXCHANGE: A one-month program to foster international understanding, goodwill, and fellowship. CAP exchanges cadets with similar organizations in Canada, Europe, and the Middle and Far East. Approximately 200 cadets and a like number of foreign participants representing some 22 countries will participate in the exchange. The IACE uniform (\$96.00) and registration fee (\$20.00). *Cost \$116.00 **Personal funds \$135.00 - \$200.00



CADET OFFICERS' SCHOOL: A ten-day course designed to increase the effectiveness of cadet officers. Curriculum includes psychology of leadership, problem solving techniques, public speaking, physical fitness, and orientation trips. Instruction is divided between lecture and seminar. There is also a field exercise and a graduation parade. *Cost \$60.00 **Personal funds \$30.00



AIR FORCE ACADEMY SURVIVAL COURSE: A one-week course planned and conducted by USAF personnel at the AF Academy, Colorado. Course is designed to acquaint cadets with the art of survival. Training includes water survival, sustenance of life while living off the land, and the development of life-sustaining techniques in mountainous country. *Cost \$35.00 **Personal funds \$20.00

CADET ACTIVITIES LISTED BELOW DO



FEDERAL AVIATION ADMINISTRATION CADET ORIENTATION PROGRAM: A one-week program planned and conducted by the FAA Academy at Will Rogers Field, Oklahoma City, Oklahoma. The course is designed to acquaint cadets with the history and organization of the FAA and to develop an understanding of the functions and responsibilities of its various units. It also provides information on career opportunities in the FAA and entrance requirements. *Cost \$40.00 **Personal funds \$20.00



SPACE FLIGHT ORIENTATION COURSE: A one-week course designed to further the aerospace education of cadets and to motivate them toward careers in aerospace and allied sciences. Course includes history, philosophy, and objectives of space flight; propulsion and structural design of space vehicles; guidance, navigation, instrumentation, and communication; systems engineering and visits to an astronautic and manufacturing engineering laboratory. *Cost \$40.00 **Personal funds \$20.00



ATC FAMILIARIZATION COURSE: A one-week course planned and conducted by USAF personnel. Course provides familiarization training at ATC Undergraduate Pilot Training bases to stimulate an interest in the USAF as a career. Course includes briefings on mission and operation of a training wing; academics; visits to control tower, maintenance, propulsion, parachute and aero repair shops; air search and rescue indoctrination, and physiological training. *Cost \$40.00 **Personal funds \$20.00



AIR FORCE LOGISTICS COMMAND ORIENTATION PROGRAM: A one-week program designed to provide cadets with briefings and presentations on the global aspects of AFLC support. Cadets will observe air-frame maintenance, component repair and overhaul. *Cost \$40.00 **Personal funds \$20.00



MEDICAL SERVICES ORIENTATION PROGRAM: This is a one-week program planned and supervised by USAF personnel, and is designed to acquaint cadets with various medical fields both in the USAF and civilian life. *Cost \$40.00 **Personal funds \$20.00



NATIONAL CADET COMPETITION: Competition conducted at the national level. One team from each CAP region competes after wing and region competition. Teams are organized and competition is conducted in accordance with CAPP 65 and CAPP 66. Events include competition in aerospace knowledge, physical fitness, standard and innovative drill. **Personal funds \$15.00



physical fitness, standard and innovative drill. **Personal funds \$15.00

NATIONAL EMERGENCY ASSISTANCE TRAINING

Approximately one-week courses conducted at various training sites throughout the country. Curriculum includes rigorous training in leadership, survival, and land search and rescue techniques to prepare cadets to function effectively as members of CAP land search and rescue teams. Exact dates and location of schools will be published by letter in the Spring. *Cost and **Personal funds as prescribed by individual special schools.



PARARESCUE ORIENTATION COURSE: A one-week course planned and conducted by USAF personnel at Kirtland AFB, New Mexico. Course is designed to allow CAP cadets to participate in various facets of Air Force pararescue training. Curriculum includes helicopter orientation flights, observing parachute jumping techniques, and survival methods in mountainous country. *Cost \$35.00 **Personal funds \$20.00

ALL CADETS

CHAPLAIN SPONSORED CONFERENCE: The Christian Encounter/Spiritual Life Conference is a USAF Chaplain sponsored activity designed to augment the spiritual and moral aspects of the CAP Cadet Program and to stimulate active participation in the church of the cadet's choice. *Cost \$20.00 **Personal funds \$20.00

^{*}ESTIMATED COST. THIS INCLUDES THE COST FOR MEALS, PLUS \$2.00 PER NIGHT TO COVER THE COST OF BILLE WITH THE EXCEPTION OF THE CHAPLAIN SPONSORED CONFERENCE. INSTRUCTIONS FOR THE CHAPLAIN SPONSORED

^{**}RECOMMENDED PERSONAL FUNDS. FUNDS WILL BE HANDCARRIED AND ARE THE PERSONAL RESPONSIBILITY OF T. CLEANING, TOURS, AND PERSONAL ITEMS.

^{***}CADET WILL HANDCARRY TO THE ACTIVITY A COMPLETED COPY OF THE FOLLOWING: CAP FORM 31- APPLICATION



78 QUALIFICATIONS & REQUIREMENTS CHECKLIST



Male or female cadet 17 years of age minimum ☐ Amelia Earhart Award by 31 Dec 76 required (Spaatz preferred). ☐ National Headquarters approval required prior to selection without Earhart Award ***CAPF 31 - Application ☐ ***CAPF 32 - Physical ☐ Note additional clothing requirements on back page.	IACE
☐ Male or female cadet 16 years of age minimum ☐ Billy Mitchell Award by 31 Dec 76 ☐ ***CAPF 31 - Application	* M * COS
Male or female cadet 16 years of age minimum ☐ Billy Mitchell Award by 31 Dec 76 ☐ ***CAPF 31 - Application ☐ ***CAPF 32 - Physical ☐ Note additional clothing requirements on back page.	* M * AFASC
REQUIRE THE MITCHELL AWARD:	***************************************
☐ Male or female cadet 15 years of age minimum ☐ Four achievements in Phase II ☐ ***CAPF 31 - Application. ☐ CAPF 32 - Physical	FAACOP
☐ Male or female cadet 15 years of age minimum ☐ Four achievements in Phase II ☐ ***CAPF 31 - Application	SFOC
☐ Male cadet 15 years of age minimum ☐ Four achievements in Phase II ☐ 10 hours of pilot flying time highly recommended ☐ ***CAPF 31 - Application ☐ ***FAA Class III Medical Certificate ☐ Note additional clothing requirements on back page.	ATCFC
☐ Male or female cadet 15 years of age minimum ☐ Four achievements in Phase II ☐ ***CAPF 31 - Application	AFLCOP
☐ Male or female cadet 15 years of age minimum ☐ Four achievements in Phase II ☐ ***CAPF 31 - Application.	MSOP
Male, female, or mixed teams Phase II, III, or IV cadets under contract or completed 15th Achievement (No STP members) Wing and region commanders will conduct competition to select teams for national competition.	A C A
☐ Male or female cadet ☐ Phase I Completed ☐ ***CAPF 31 - Application ☐ Note additional clothing requirements on back page.	A C A NEAT
☐ Male cadet 15 years of age minimum ☐ Phase I completed ☐ ***CAPF 31 - Application ☐ ****CAPF 32 - Physical ☐ Note additional clothing requirements on back page.	A C A PJOC
☐ Male or female cadet ☐ ***CAPF 31 - Application	ALL CADETS CSC

IS, SHOULD THIS CHARGE OCCUR. FUNDS WILL BE HANDCARRIED TO THE COURSE SITE FOR ALL ACTIVITIES, ED CONFERENCE WILL BE PUBLISHED BY THE OFFICE OF THE NATIONAL CHAPLAIN.

HE CADET, FUNDS WILL BE USED AT THE DISCRETION OF THE CADET FOR SUCH ITEMS AS LAUNDRY AND

N AND/OR APPROPRIATE PHYSICAL EXAM IF REQUIRED (CAP FORM 32 OR FAA FORM, ALL ITEMS SUCCESSFULLY PASSED).

CADET SPECIAL ACTIVITIES CONTINUED . . .

ACTIVITY ENTRANCE REQUIREMENTS:

- 1. Physical examinations shall be completed after the cadet is notified of selection but not later than 30 May. Cadet will immediately report the results to his squadron commander who will in turn notify wing headquarters so that the wing may select alternates if necessary.
- 2. The cadet will handcarry a copy of the physical examination form (CAPF 32 or the FAA form, as required) to the activity, and present it to the activity director upon arrival.
- 3. The cadet will also handcarry and turn in to the activity director his copy of application, CAPF 31, with Sections I, IV, and V completed.



Clothing List FOR CADET SPECIAL ACTIVITIES

MALE CADET UNIFORM ITEMS

3 complete uniforms shade 1549/1550 (with accessories)

1 blue flight cap

6 pair black socks

1 blue raincoat

1 pair black low quarter shoes

1 utility uniform

FEMALE CADET UNIFORM ITEMS

2 shade 1549/1550 service uniforms

(with accessories)

1 blue flight cap

3 pair neutral shade hose

1 blue raincoat

1 pair black smooth leather pumps

1 black handbag with shoulder strap

1 utility uniform (blue)

RECOMMENDED PERSONAL AND MISCELLANEOUS CLOTHING ITEMS-MALE & FEMALE

Appropriate civilian suit/party dress and accessories
Sweater or jacket
Undergarments
Sports wear including gym shoes
Handkerchiefs
Swimsuit
Bath towels and wash cloths
Pajamas/nightgowns
Sewing kit
Sunglasses
Shoeshine kit
Flashlight and extra set of batteries
Iron
Toilet articles/cosmetics
First aid kit (kaopectate)
Camera

ADDITIONAL CLOTHING REQUIREMENTS BY COURSE

IACE - Blazer outfit. NOTE: No military uniform required for IACE except utility uniform or flight suit when specifically directed for certain countries.

AFASC and PJOC - 3 sets 1- or 2-piece utility uniforms with cap.

1 pair combat boots/brogans with 4 pair heavy socks.

1 field jacket. 1 pair work gloves. (Also, one stocking/ski cap

or equivalent warm head covering.)

ATCFC - 1 flying suit with leather gloves. 1 pair combat boots/brogans with heavy socks. 2 sets 1- or 2-piece utility uniforms with cap.

NEAT - As directed by individual special school.

CAP Victims Make Exercise Look Real

BY LT. COL. CHARLES T. WALKER Deputy Commander Maryland Wing

BETHESDA, Md.—The Maryland Wing of the Civil Air Patrol recently participated in a simulated disaster exercise with other relief agencies in the state.

The exercise scenario took place at a basketball game at Wirt Junior High School in Riverdale, Md.

The stands were filled with student spectators and many parents and relatives when, suddenly at 7:50 p.m., an explosion rocked the building and the north wall of the gymnasium collapsed on top of packed bleachers.

The school boiler room had exploded and the crumbling debris had injured more than 70 spectators.

He immediately contacted the Fire Board dispatcher on his walkie-talkie. Within minutes eight ambulances were on the scene.

Injuries ranged from contusions to first degree burns. There had also been several fatalities. Trained ambulance crews moved quickly to identify the most seriously injured and administered first aid.

The victims had all been tagged to indicate priority of evacuation, and within minutes all ambulances were taking them to one of the three nearby hospitals—Doctors, Leland or Prince Georges.

The emergency rooms at all the hospitals had been contacted and were ready. They had already alerted off-duty personnel to report and were prepared to accept the deluge of victims.

The ambulances made several round trips and transported 25 simulated casualties to each hospital.

A physician assisted by several nurses examined the victims before they were wheeled into the emergency room and issued orders to the staff on the proper disposition of the victims as medical personnel took them into the hospital.

Each hospital had its disaster plan in high gear and each casualty received the utmost in professional care.

This simulated disaster exercise was conducted by the three hospitals in cooperation with the Prince Georges County Office of County Hospital Commission, the American Red Cross and the Civil Air Patrol.

CAP cadets and senior members from the Maryland and National Capital wings served as the victims.

They arrived early at the school to be made up with their assigned injuries. Realistic effects were achieved by experts using wax, mucilage and dyes to simulate the various injuries and each victim was tagged in advance to designate the priority of the injury.

A civil disaster exercise is required semiannually of hospitals to maintain accreditation and many hospitals satisfy the requirement by conducting a tabletop exercise.

Prince Georges County, however, elected to undergo a very realistic test by involving a large number of simulated victims, numerous rescue vehicles and three different hospitals.

Public interest in such an ambitious undertaking was shown by the attention it received from the news media.

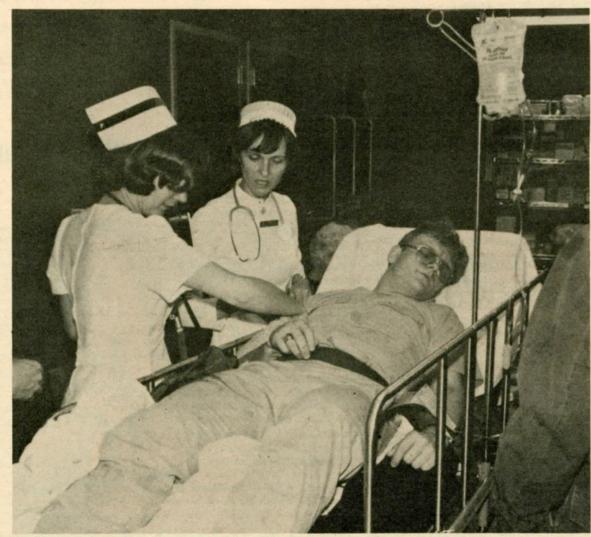
In addition to coverage by the Washington Post, three television stations filmed the action at both the school and the participating hospitals for that evening's newscast.



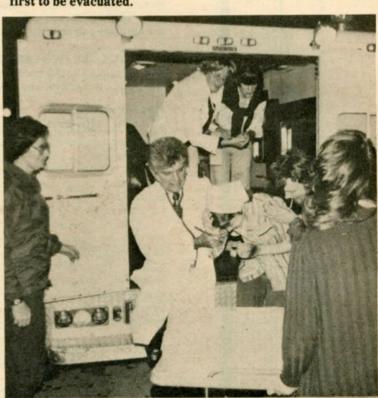
A squadron member is made up for a head wound.



A victim with a simulated open chest wound is one of the first to be evacuated.



Hospital personnel simulate the actual medical procedures that would be called for according to the indicated injury.



The walking wounded are helped from an the ambulance at the hospital.

JANUARY 1978



PULL OUT AND POST



CIVIL AIR PATROL BULLETIN



PUBLISHED BY NATIONAL HEADQUARTERS

MAXWELL AIR FORCE BASE, ALABAMA

INFORMATION

NUMBER 1

1. PURCHASE OF CAP FEATURE FILM. A print of the CAP feature film, "Always Vigilant," may be purchased for the sum of \$145 from: General Services Administration, National Archives and Records Service, National Audiovisual Center, Washington DC 20409. Prepayment should accompany order. Make check payable to: National Archives Trust Fund (NAC). To order, send an official purchase order or a letter on official stationery. Delivery may be expected within 30 days after receipt of order. However, please allow six weeks before making inquiries. Order CAP film by the following file number and title: 008835, "Always Vigilant-Civil Air Patrol Volunteers" (SFP 2249).

THE CAP STORY SLIDE PRESENTATION. There has been a dramatic increase in the number of orders received by HQ CAP-USAF/OI the past few months for the "CAP STORY" slide presentation and script. It is an encouraging sign that more and more local CAP units are taking advantage of this convenient way to tell members of a community about local CAP unit activities. We ask unit commanders to select one, two, or three articulate CAP members to make the presentation of the "CAP STORY" to a local community audience. Institute practical training sessions for those CAP members selected. The only way to be accomplished is through practice, practice, practice. The pros do it.

3. ATTENTION CAP UNIT COMMANDERS. The following item appeared in a wing newsletter. The comments are not new, as National Headquarters has received complaints similar to those expressed. We thought we would share it with you.

DID THIS HAPPEN IN YOUR SQUADRON?

It amuses me to think that your organization spends so much time looking for new members . . . when I was there all the time. Do you remember me?

I'm the fellow you asked to join. I paid my dues and then was asked to be a loyal and faithful member. I'm the fellow who came to every meeting, but nobody paid any attention to me. I tried several times to be friendly, but everyone seemed to have his or her own friends to talk to and sit with. I sat down among some unfamiliar faces several times, but they didn't pay much attention to me.

I hoped somebody would ask me to do something or to somehow participate or contribute, but no one did. Finally, for some reason or another, I missed a meeting. The next meeting no one asked where I had been. I guess it didn't matter very much whether I was there or not. On the next meeting date I decided to stay home and watch a good TV show. Again, it seemed that I was not missed.

You might say that I'm a good guy, love my community, and would like to help make it a better place. You know who else I am? I'm the member who didn't come back or

4. FEATURE FILM. The Air Force film, TF 6869 CAP, "First Aid for Aircrews," previously restricted, currently used as part of the Air Force physiological training for aircrews, has been approved for use in CAP emergency services training. This is an excellent film for members of Civil Air Patrol to view as part of their overall training in emergency services. Send your film loan requests to Central Audiovisual Library, Aerospace Audiovisual Service, Norton AFB CA 92409. Requests must reach the AF Film Library at least three weeks before showing dates. Include film number and title in your request. Identify yourself as a CAP member and your CAP unit name. Also list a primary and alternate showing date. Loan period to civilian organizations is limited to two weeks.

5. PUBLIC SERVICE CERTIFICATES. Public Service Certificates are now available through OIP. It is suggested that Certificates of Appreciation be awarded personnel, and Public Service Citation Certificates be awarded to firms, clubs, and other groups who have performed a service for Civil Air Patrol.

OPERATIONS

6. CIVIL AIRCRAFT LANDING PERMITS AT USAF INSTALLATIONS. Prior to landing a CAP corporate aircraft or member-owned aircraft at any Air Force installation, the following actions are required: (a) For a CAP corporate aircraft, the pilot must have in his or her possession an approved copy of AF Form 181 (Civil Aircraft Landing Permit). This form is obtained from the USAF-CAP liaison office. (b) For member-owned aircraft, pilot must have in his or her possession an approved AF Form 181 for the specific aircraft and the specific Air Force installations. The procedures for obtaining the Air Force Form 181 are outlined in AFR 55-20, "Use of USAF Installations by Non-DOD Aircraft." A simple letter request or telephone call to HQ CAP-USAF will not suffice. (c) The pilot operating CAP corporate aircraft or member-owned aircraft into an Air Force installation must comply with the requirements of paragraph 5, AF Form 181, prior to each flight. The approved/completed AF Form 181 permits CAP-owned and operated aircraft or a CAP member-owned aircraft to use designated USAF installations only for official CAP activities. The permit does not authorize the use of USAF installations in lieu of civil airports to ease ground transportation requirements, for the convenience of passengers or aircraft operator, for transient aircraft services, for commercial enterprises, for procuring government business or contracts, or for customs handling purposes. Air Force regulations require HQ CAP-USAF to verify and indorse all CAP or CAP members' civil aircraft landing permit requests prior to their submission to HQ USAF for final approval/disapproval. From the time of re-

THE CIVIL AIR PATROL BULLETIN IS PUBLISHED MONTHLY. IT CONTAINS OFFICIAL ANNOUNCEMENTS, INTERIM CHANGES TO CAP PUBLICATIONS, AND OTHER ITEMS OF INTEREST FOR ALL CAP MEMBERS.

CAP Bul

ceipt at HQ CAP-USAF, back to the requestor.

CAP USE OF AUTO FTS, and USAF WATS with AFM 100-22, the a Utilization by other pers

TRAINING

8. ATTENTION SQUA containing events, dates, as follows:

8 Jul

9-15

21-23 11-17

ADMINISTRATION 9. NEW AND REVISE

> a. CAPR 35-1, "A Change 1, CA

Change 1, CAP

CAPP 50-1, "C

e. CAPP 52-2-3, supersedes CAPP 218, A

f. CAPP 52-2-4, CAPP 207, August 1972

g. CAPFs 19 and thereto, November 1977

h. CAPF 50, "Cac

FOR THE EXECUTIVE

DONALD A. O'NESKY Director of Administrat

JOIN THE



FLIGHT SERVICE STATION—Capt. Jon Ellsworth, who is also chief of the Billings, Mont., Flight Service Station, explains the mechanics of a piece of direction finding equipment to Cadets Evelyn Bean and Karen Patterson (right) of the Billings Comp. Sq. (Montana Wing) during a recent squadron tour of Logan International Airport. (Photo by 2nd Lt. Jim Anderson)

New Bookstore Prices

For the 748 Line Items in the Bookstore Inventory, the following price chances are required for 1978. In summary the following changes are made:

REDUCTIONS: 5 Items \$.25 or less

INCREASES: 40 Items \$.25 or less

13 Items \$.75 or less

10 Items \$1.00 or less

12 Items \$2.00 or less

10 Items Over \$2.00

Cat. No.	Item	New Cost	Cat. No.	Item	New Cost
0041	Curry Packet	\$6.00	0748	Hat Dev Sr Male Off	\$ 2.25
0637D	Calif Wg Patch	.40	0748A	Hat Dev Sr Male Enl	1.95
0637E	Colo Wg Patch	.40	0748C	Hat Dev Fem Cdt Enl	1.35
06370	Kansas Wg Patch	.45	0749E	Insig Christ Chap	2.75
0638B	N. H. Wg Patch	.35	0749G	Insig Med Off	2.75
0638N	S. C. Wg Patch	.45	0749H	Insig nurse	2.75
0638T	Va Wg Patch	.50	0749J	Insig Jewish Chap	2.75
0638W	Wisc Wg Patch	.40	0820	Metal Ltrs CAP	1.25
0646G	Cdt MSgt Chev	1.25	0820B	Bullion Ltrs CAP	3.50
0646H	Cdt TSgt Chev	1.25	0830A	Emerg Svs Decal	.95
0646I	Cdt SSgt Chev	1.25	0836	Cloth CAP Seal	1.25
0646J	Cdt Sgt Chev	1.25	0900	CAP Seal Enamel	5.95
0646K	Cdt A/1C Chev	1.25	0912	14K Pen & Pencil	29.95
0647	Cdt Shoulderboards	6.95	0912A	14K Pen	14.95
0654	Acd Sgt LSI	3.00	0914	12K Pen & Pencil	24.95
0655	Adm Asst LSI	3.00	0914A	12K Pen	12.95
0656	Color Guard LSI	3.00	0916	Chrome Pen & Pencil	17.50
0657	1st Sgt LSI	3.00	0916A	Chrome Pen	8.95
0658	Flt Sgt LSI	3.00	0918F	Charm	2.25
0659	Guidon Bearer LSI	3.00	0918G	Charm Bracelet	2.95
0660	Sqd Ldr LSI	3.00	0918I	Bowknot Pin	2.75
0746	Insignia, Col Reg	1.75	0918K	Letter Opener	3.50
0746A	Insignia, Col Min	1.75	0924A	Plaque	14.95
0746C	Insig, Lt Col Reg	1.75	0924B	Plaque	39.50
0746D	Insig, Lt Col Min	1.75	0952	8" Decal	2.75
0746F	Insig, Maj Reg	1.75	0954	10½" Decal	2.25
0746G	Insig, Maj Min	1.75	0970	Blazer	54.75
07461	Insig, Capt Reg	1.75	0990C	Flight Cap	3.75
0746J	Insig, Capt Min	1.75	0992	Uniform Kit Sr	24.25
0746L	Insig, 1 Lt Reg	1.50	0993	Uniform Kit Cdt	19.75
0746M	Insig, 1 Lt Min	1.50	0994	Uniform Kit Cdt	23.50
07460	Insig, 2 Lt Reg	1.50	0996	Utility Unif Cdt	16.95
0746P	Insig, 2 Lt Min	1.50 1.95	1000 1002	Flight Jacket	21.95 10.75
0746R	Insig, CWO Reg	1.95	1002 1005F	Flight Computer Shbds Col	15.00
0746S 0746T	Insig, CWO Min	1.95	1005G	Shbds Lt Col	13.50
0746U	Insig, WO Reg Insig, WO Min	1.95	1005H	Shbds Maj	13.50
0745I	Insig, Col Plastic	1.95	1005H	Shbds Capt	12.50
0745J		1.95	1005J	Shbds 1st Lt.	11.75
07455 0745K	Insig, L/C Plastic	1.95	1005J 1005K	Shbds 2nd Lt	11.75
0745L	Insig, Maj Plastic Insig, Capt Plastic	1.95	1005K	Shbds CWO/WO	12.50
0745L 0745M	Insig, 1 Lt Plastic	1.95	1005 V	Cummerbund Set	10.25
0745M	Insig, 2 Lt Plastic	1.95	1005L	Short Sleeve Shirt	8.75
0745N 0745O	Insig, WO Plastic	1.95	0998	Jumpsuit	16.95
0745P	Insig, CWO Plastic	1.95	0330	Jumpsuit	10.50
01401	msig, Cho Flastic	1.00			

PLEASE NOTE: Change is effective Jan. 1, 1978. ALL ORDERS received after Dec. 31, 1977 must be at the new prices.

NEWS BRIEFS

Cadet Wins Spaatz Award

CHARLOTTE, N.C.—Cadet William C. Scheppegrell of the 111th Air Rescue and Recovery Cadet Sq. has successfully completed the examination for the Gen. Carl A. Spaatz Award.

Scheppegrell, who became a CAP member in October 1975, completed the cadet training program in two years. He is a recent graduate of Carlotte Catholic High School and presently attends the University of North Carolina at Charlotte.

He is still active in the cadet program and is vice-chairman of the National Cadet Advisory Council, as well as being cadet deputy commander of his unit.

Manager Uses CAP Offices

ROGERS, Ark. — Benjamin Ashmore, manager of Rogers Airport, has set up temporary offices with the Rogers Comp. Sq. (Arkansas Wing) in their building near the airport entrance.

The city of Rogers has accepted an FAA grant which will enable it to remove existing airport buildings and construct new administrative offices, a fixed base operations, as well as corporate and private hangars.

Ashmore is a member of the Rogers Comp. Sq. and a retired Air Force lieutenant colonel.

Navy ROTC Supports Squadron

MIDVALE, Utah—The Mt. Olympus Cadet Sq. and the Naval ROTC unit at the University of Utah have signed an agreement of mutual support and cooperation.

New facilities, offering an indoor drill area, four classrooms, a conference room and office space were offered to the squadron by the ROTC. The squadron membership voted to accept the offer and made arrangements to move to the new location.

A naval officer gave a briefing on the ROTC program and told of its belief in supporting youth-oriented organizations.

Pennsylvania Rangers Compete

HAZELTON, Pa. — Twelve ranger teams from all parts of Pennsylvania participated in a recent Civil Air Patrol Competition here.

Rangers were scored on communications, field equipment checks, navigation, first aid, physical fitness, and all phases of search and rescue.

Monroe Cadet Sq. 604 took first place. Second place went to Philadelphia Cadet Sq. 103. Both cadets and senior members took part in the competition.

The Monroeville team will host the other rangers at an awards banquet in March.

Exercise Held In Spite Of Rain

KNOXVILLE, Tenn.—The Tennessee Wing held its annual SARTEST during a day-long rain recently.

Col. William C. Tallent, wing commander, said 84 persons participated in the simulated search for a missing aircraft, enroute from Memphis to Bristol. Headquarters for the exercise was the Morristown Airport.

An orange parachute, simulating a downed pilot was placed about three miles north of Newport on Highway 25E. It was found at 2 p.m. that afternoon.

Not as many flights as anticipated were able to take off due to the weather conditions during the exercise. Parts of the exercise were, therefore, postponed until later.

Tallent said that the people taking part in the exercise "got some valuable training out of the mission, especially the ground crew which gained experience using directional finding equipment."

Cadet Guides Rescue Squad

CLEVELAND, Ohio — Cadet David DiNicola of the Dover Bay Cadet Sq. 1107 (Ohio Wing) recently led a rescue squad to the scene of an accident in Cleveland's Metropark Rocky River.

DiNicola saw a young man fall off a cliff at Little Cedar Point and ran to the Trailside Interpretive Center to inform park officials. He guided the night watchman to the victim. When the park rangers and emergency squad arrived, he guided them to the location also.

Park Naturalist Karl D. Smith sent a letter to DiNicola's squadron commander that said, "Dave clearly showed his real concern for the injured person, his ability to stay calm in an emergency, and dedication to being of service to others. Dave should be congratulated for his mature judgement. He is a credit to his unit."

Ground Team Guidance Sought

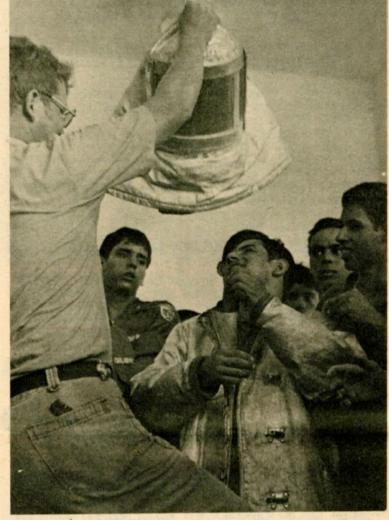
By MAJ. ROBERT MATTSON HQ. CAP-USAF

Before I get into this month's topic, I would like to make an observation based on the response I received to the November column, requesting your ideas on how to improve the paper work flow on a mission.

The response was un-

derwhelming! Paper work flow was reduced to zero. I received no comments and no ideas!

Am I mistaken about the need to reduce the paper work on a SAR mission? Should I make the assumption that your lack of response indicated complete satisfaction with the current procedures?



FIREHOUSE VISIT—Navy firemen let Puerto Rican cadets try on asbestos suits during a recent Puerto Rico Wing encampment at Roosevelt Roads Naval Station at Ceiba, P.R. During the tour, the cadets also saw a demonstration on how an aircraft fire is put out, and some of them got to operate a fire hose. (Photo by Maj. Ernesto Cortes)

SAR PEOPLE

Or, should I continue to listen to the counsel of a few active and dedicated CAP members and to my instinct, which tells me there must be a better way?

I need to hear from you to keep me on the right track. Maybe I should be concentrating on other areas, but, if so, what are the areas? Tell me, please.

One area that I believe is causing trouble, and I have a few letters and comments to support my observations, is the proper use and support of ground teams. CAP is definitely an air-oriented organization, which is as it should be. But, airpower alone cannot assist the survivors; other participants are required.

What good is it for an aircrew to spot a survivor in need of immediate assistance if they are unable to direct a well-placed ground team to the site?

Much time could be wasted while the aircrew returned to base, debriefed, and a ground team was dispatched.

In some areas CAP does not have ground teams since other agencies have that responsibility, but CAP must be able to coordinate with them. CAP has the aircrews, the communicators and either their own ground teams or access to other local ground teams.

It is imperative that CAP be able to coordinate these three functions into a harmonious team to aid the survivor. Otherwise, the mission becomes one solely oriented toward crash

locating. The ground team must be an equal partner with the aircrew and the communicator on the emergency services team.

When a CAP unit develops ground teams to aid the survivor, it is essential that the team be adequately prepared and supported by the unit.

When using ground teams to assist in saving lives we cannot send them into the field poorly trained and poorly equipped. And, we must not relegate the ground team to solely a cadet activity!

The information provided for ground teams in CAPM 50-15 is incomplete, and much better guidance for the training and use of ground teams must be developed.

Some fine work on this subject has been accomplished by a few individuals and units throughout the country. But, each is going their own way and there is not total agreement on what the role of the ground team should be.

I am asking all interested personnel to participate in developing a basic CAP ground team training/participation program which will place emphasis on assisting the survivor.

I have asked Maj. Dave Carter, CAP, to be the focal point for collecting any information pertaining to ground teams. We are asking for any interested persons to voice their views concerning ground teams.

He has developed a questionnaire that asks such questions

- What do you see as the purpose of a CAP ground team?
- Outline the basic organization of a ground team, including specific duties of members.

 What is the minimum equipment for individuals? For the team?

 Do you support the ideas of levels of team/individual skills/knowledge? If so how would you define the levels?

 Should teams and/or individuals be recertified? If so, by whom and how often?

 Is there a need to standardize policies on the following? Why?

1. Air/ground coordination.

2. Incident scene control.

3. Deployment of ground teams.

4. Training records.

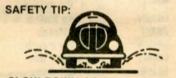
 What skills should ground team members be trained in.

 Are some skills only for specialists? If so, which are required for all and which are for those wishing to specialize?

If you wish to participate in the development of guidance that will be contained in the new emergency services manual, write to either Dave Carter at 1906 Beaver Road, Highland Springs VA 23075, or to me at Hq. CAP-USAF/DOSS, Maxwell AFB, AL 36112.

We want to include as wide a cross section of the country as possible. Please drop us a line so that we can have the benefit of your experience.

Thank you for your time and interest.



SLOW DOWN GOING THROUGH PUDDLES.

Citizen Help Needed To Curb Smuggling

By LT. COL. HAYDEN C. MOORE HQ. CAP-USAF

Director, Emergency Services

MAXWELL AFB, Ala.—In July 1976 the Civil Air Patrol News printed a list of practices which have been identified as indicators of possible drug smuggling activity. Each of us has a responsibility as a private citizen to assist in preventing the entry of illegal drugs into our country. A phone call by an alert, responsible individual can be very effective in halting the illegal drug flow.

The following list identifies what to look for, not only at airports, but wherever you are:

- 1. Passenger seats removed from the aircraft.
- 2. Numerous cardboard boxes, duffle bags, plastic bags, or other unusual containers inside the aircraft.
- 3. Windows of the aircraft

covered by curtains or taped up.

4. Pilots or passengers displaying large amounts of cash

and making cash payments for fuel or services.

- 5. Pilots requesting maps or information pertaining to areas in Mexico.
- 6. Unusual odors or other strong odors about the aircraft. (Perfumes and deodorizers are often used to disguise the smell of marijuana.)
- FAA registration numbers which appear to be false, altered or changed.
- 8. Pilots or passengers reluctant to leave the immediate area of the aircraft during refueling or during the time on the ground.
- Parking of aircraft long distances from the line shack or at far ends of the ramp.

10. Bulk purchases of aviation fuel in cans or drums.

- 11. Aircraft flying or landing without lights after dark.
- 12. Suspicious vehicles (trucks with campers or vans) waiting at or near airports, little used roads, or other suitable landing
- 13. Suspicious landings where aircraft meet vehicles, remain on the ground for a brief period and depart.
- 14. Low flying aircraft near the international boundary.
- Aircraft avoiding any populated areas.
- Aircraft utilizing valleys, canyons, etc., in order to avoid radar detection.
- 17. Aircraft utilizing uncontrolled airports, abandoned airfields, remote roads, etc., for landing.

18. Encounters of fuel stashes in remote areas.

If you observe any of the above, call any U.S. Customs office and let them know about it.

Phone numbers and addresses for the U.S. Customs Air Support Branches are listed below. They would like to hear from you.

NAS North Island P.O. Box 13 San Diego, CA. 92135 FTS: 895-5652 COMM: (714) 293-5652

Davis Monthan AFB P.O. Box 15001 Tucson, AZ 35707 FTS: 762-6546 COMM: (602) 792-6546

Homestead AFB 255-8011 Homestead, FL 33030 FTS: 350-4606-4610 COMM: (305) 257-8543 NAS New Orleans P.O. Box 478 Belle Chasse, LA 70037 FTS: 682-2251 COMM: (504) 589-2251

P.O. Box 8073 El Paso, TX 79918 FTS: 572-7448 COMM: (915) 543-7448

P.O. Box 6041 McDill AFB Tampa, FL 33608 FTS: 822-3688 COMM: (813) 830-3688

Sheraton Airport Inn Sky Harbor Airport 3000 E. Sky Harbor Blvd. Phoenix, AZ 85034 FTS: 261-6801 COMM: (602) 792-6546

P.O. Box 37 Room N128 Love Field Terminal Dallas, TX 75235 FTS: 729-4103 COMM: (214) 655-4103



MILITARY SPONSOR—Lt. Col. Robert Shellenberger, commander of the 17th Tactical Airlift Sq. at Elmendorf AFB, Alaska, reviews a CAP manual as CAP members 1st Lt. Paul J. Ballmer, commander of the Elmendorf Cadet Sq. (left), and Cadets Paul E. Knutson and Naven J. Knutson look on. The Air Force squadron recently became the sponsor of the CAP cadet squadron. (USAF Photo)

Wing Forms Press Association

GROSSE ILE, Mich.—The role of the information officer in the Michigan Wing has taken on a new dimention with the formation of the Civil Air Patrol Press Association of Michigan (CAP-

11189

Madonna M. Finney Mike F. Niles.....

Mark J. Semeneck

Frank T. Domina.... Salvatore J. Seno.... George F. Williams.

Chris J. Hare Brian E. Reynolds PAM), according to 1st Lt. Deborah A. Stevens, Michigan Wing press officer.

Lt. Col. William E. Day, director of information, conceived this "organization within an

Richard J. Nadolny

Connie S. Robertson

Mark W. McMahon

JamesD. Beall Eleanor V. Caldwell

Ellen M. Caldwell.

Mike A. Truitt... Keith T. Shostak

Dennis R. Brooke

Richard A. Mahone Steven P. Ho....... Vilma T. Vazquez ... organization" to impress upon the individual unit information officers that they are members of a team.

"The information officer must realize his importance in three areas," Day explained. "First, the internal information program through tools like unit publications, the external program through press releases and announcements, and community relations through contacts and visibility at the community level."

Believed to be the only organization of its type within CAP, CAP-PAM will provide a forum where information officers can exchange ideas and solve problems. "Ideally, this will lead to a better promotion of Civil Air Patrol," Stevens added.

All information officers and newsletter editors were recently presented with a CAP-PAM membership certificate. Officers will be elected at a membership meeting later this month

Mitchell Awards—November 1977

DETAWAR

Earhart Awards-November 1977

Timothy D. Roberts

Fernand M. Espiau ... Victor H. Stephenson

Michael J. Patrick Richard D. Anstine John D. Kenney....

Charles S. Downing

Karl T. Thiebolt Michael Nelson . Matthew Lewis .

David C. Ham Michael E. Mccune

Blake D. Devolld

Camille B. Nelson

IVALUETA	
Wilfred E. Odom Jr	01016
Mark J. Osborne	
Brian E. Yates	02064
Jimmy D. Myers	
Colin D. Burgess	
Robert P. Sundstrom	04091
Michael W. Barnes	
Norman H. Follett	04220
David R. Price	
Ken J. Drucker	04339
Monique A. Allard	
Steve D. Lawrence	
Janis L. Conright	
Edward D. Garner	
Ron W. Jackson	
Robert M. Joy	06022
Sayeed Khan	07008
Andrew W. Geiss Jr	07008
Darrell J. Joy	08026
Mark A. Poske	08033
Alessandro Cuevas	
John T. Benjamin	08159
Rodney J. Ryals	08423
Robert L. Hunter	09002
Tracie A. Griffis	09002
Arlie C. Griffis Jr	09002
James P. McCleskey	09090
Steven E. Williamson	10049
Kenneth R. Curtin	
Matthew R. Gibbons	
C. A. Cokinos	
Tom J. Ackerman	
Donald G. Farris	
Bernard B. Brown	17036
Joseph E. Wierzbicki	18004
Matthew H. Fisk	18039
Stephen J. Frankewicz	18070
John J. Green	
Robert R. Poirier	19057
Frank L. Fazzalari	20038
Daniel H. Bliss	20086
Timothy A. Kudla	20000
Beth A. Farrell	20107
Beth A. Farrell Femilia W. Pierce	2010/
Vincent Dandrea	20117
Allan J. Cook	20145
Elizabeth Romanik	
Cris A. Wolons	20183
Jeffrey C. Schroeder	20183
Chas D. Caron	20228

Richard A. Angelo	
Scott C. Halseth	
Marybeth E. Haller	
John A. Andersen	
Thomas J. Sugrue	
Richard A. Baize	
Daniel A. Lilly	
Wayne D. Whitlark	20260
Bob J. Hyser	21017
Barbara E. Harasyn	21030
Keith W. Belt	
Michael D. Schorr	
Paul A. Wilson	25033
Johnnie L. Nichols	25053
Brett W. Johnson	25053
Gregory J. Rands	
Terrance L. Long	25054
Cindy M. Scharf	
Brian K. Bowen	
Richard K. Jessop	
Kathy A. Bennett	
Colin B. Snyder	
Eric R. Schmidt	
Jose D. Rodriguez	
Joseph M. Stankus	
Jeffrey A. Jones	. 31173
Angel L. Morales Jr	. 31224
Kevin F. Prettner	. 31247
Kevin A. Lashley	. 31370
Lloyd W. Eastland	. 32019
Michael L. Riddle	
Albert R. Edwards	
Greg S. Barlow	32082
Andrew N. Kastanas	
Jack F. Macmillan Jr	
Christinia L. Averill	32126
James F. Ghents	. 33043
Stephan A. Lubbers	34070
Lanuis D. Neer	37070
Matthew S. Connelly	
Francis J. Kayden	
Rodney J. Williams	
Steven S. Mate	
Scott C. McCleskey	34213
Edward R. McCleskey	34213
Thomas A. McMullen	35071
Mitch K. Parnell	
Mark W. Wilson	
Kirk E. Twardowski	
Karole M. Cellucci	37018
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Daniel W. Stees	37021
Gary V. Cacciani	
Joseph G. Clemente	
Robert M. Seasock	
Joseph L. Falcon	
Daniel J. Dunkle	
John C. Lappe	
Ricky A. Gavoni	
Christopher M. Garcia	37269
John J. Wlassich	
Paul R. Viens	
John J. Broadmeadow	
James E. Greene Jr	
Eric R. McGlynn	
Kim L. Whitted	
Richard W. Kadar	
Debra S. Ambrose	
Terry L. Smith	
Robert Perez	42076
Bruce D. Bray	42279
Donald L. Wisener	
Stephen R. Young	
Caroline M. Blessing	
Paul J. King	
Laurence W. Hobbs	
Lee M. Hylton	45014
Alvin G. Bowyer Jr	45017
Michael Gignac	
Peter C. Reddy	
Anthony J. Maderspach	45056
Peter M. P. Casola	
Donald J. Kniesche	
Douglas C. Keen	45122
Charles A. Hummill	
Jeffrey K. Brooke	
Lizbeth E. Samuels	
Joseph M. Irek	
Robert D. Lindholm	48053
Michael F. Doehr	
James R. Young	
Donald G. Wilson	
Donald K. Batino	51014
Naomi M. Muraoka	51020
Joan V. Nacino	
Erwin T. Hoo	
Wanda Carmona	
Margaret A. Gunthorpe	
was Per construction be	- OEGOO

Leaflet To Be Substitute For "Bird" Pamphlet

MAXWELL AFB, Ala. — The pamphlet "From Chicks to Falcons," (CAPP 10) has been deleted from the index of publications (CAPR 0-2) and will no longer be published.

The pamphlet had been a recruitment device and included in the information officer's packet in the staff duty analysis portion of the cadet program, said Col. Matthew H. Peach, deputy chief of staff for training at Hq. CAP-USAF.

OI Leaflet No. 4 on the cadet program was approved recently as a substitute for CAPP 10. The leaflet can be produced at a fraction of the manhours and cost of the pamphlet and uses 80 per cent less paper.

Paper Drives Can Raise Cadet Funds

MAXWELL AFB, Ala.—Maj. Larry Rider, chief of the Cadet Special Activities Division, said that his seminar on cadet activities at the recent National Board Meeting discussed the subject of raising funds for cadet functions.

"It occurred to me," Rider said, "that the answer might be as near as yesterday's new-spaper. With the increasing cost of newsprint for recycled paper now is a good time for your group to cash in by conducting a paper drive.

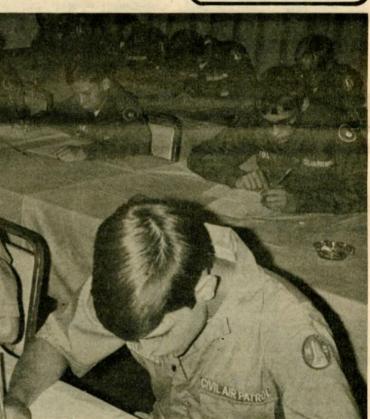
"If you are thinking of organizing a recycling drive, the first thing to do, according to the Paper Stock Conservation Committee (PSCC) of the American Paper Institute, is to contact a local wastepaper dealer to find out what the market is for paper in your area and how much he will pay. He can also help you organize your drive.

"Once you have made sure there is enough support in your group for the project, you should define your collection area, decide on a pickup method and publicize it well in advance.

"If you plan to make your paper drive on a regular basis, send out reminders two weeks before the collection for three or four months until people get into the recycling habit."

For more information on organizing a recycling drive, write Manager, PSCC; American Paper Institute; 260 Madison Avenue; New York, N.Y. 10016.





CADET COMPETITION—Cadets from the Middle East Region recently gathered in Charlotte, N.C., for the regional competition. Competition was based on written examinations, group drill and a cadet bowl.

CAP Obituaries

Civil Air Patrols News publishes each month a list of Civil Air Patrol members who have died recently. Notices of deaths should be sent to the Personnel Section of National Headquarters in accordance with Regulation 35-2, or to the National Chaplain's office — not to Civil Air Patrol News. Listed are names, ranks, dates of death and CAP unit.

BAKER, David, Captain, Nov. 20, 1977, Vidor

CAMBLIN, Irl S., Lieutenant Colonel, Sept. 26,

1977, Group 18, Illinois Wing.
CANTER, Doris M., Second Lieutenant, Aug. 29,

1977, Herndon Comp. Sq., Virginia Wing.

CARLISLE, Robert W., Major, Nov. 4, 1977,

COLBY, Carroll B., Lieutenant Colonel, Oct. 31,

COREY, Delmas H., Colonel, Sept. 15, 1977, Colorado Wing FRITZ, Edward J., Jr., Lieutenant Colonel, Nov. 12, 1977, Seacoast Comp. Sq., New Hampshire Wing

HASTY, James, Jr., Captain, Nov. 26, 1977, South Long Beach Sr. Sq. 150, California Wing.

IRONS, Charles W., First Lieutenant, Sept. 10,

KAISER, Donald L., Captain, Sept. 10, 1977, Pineland Comp. Sq., New Jersey Wing.

TURNER, Paul W., Brigadier General, Dec. 3, 1977. National Staff.

CAP News In Photos

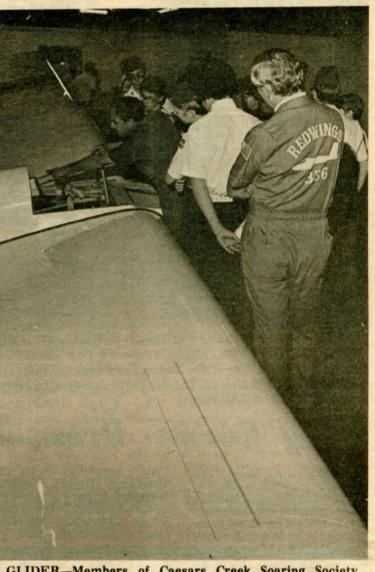


HONORARY MEMBER—Ed McMahon of The Tonight Show on NBC is presented membership certificate by Lt. Col. Stuart P. Hall, California Wing director of community relations (left), and Capt. Gerry Sherman, Pacific Region director of information. McMahon is a colonel in the Marine Corps Reserve. He was a fighter pilot in World War II and during the Korean conflict. He devotes much of his time to youth endeavors and fund raising for children's causes.





FALCON AWARD—Capt. Stephen G. Atkins of the Great Lakes Region Headquarters received the Frank Borman Falcon Award from Brig. Gen. Willard Hanshew of Indianapolis in ceremonies held at Ft. Benjamin Harrison recently. Atkins attends Indiana University and is majoring in astrophysics.



GLIDER—Members of Caesars Creek Soaring Society, Waynesville, Ohio, explained basic flight operations of gliders to visitors from the Mark N. Shirk Comp. Sq. 704 of Dayton, Ohio.

NEWCOMER—Cadets of the Martinsburg Comp. Sq. (West Virginia Wing) greet a new member, Cadet Barry Heavner (second from right), who recently transfered from the McClellan AFB Cadet Sq. in California, where his father was stationed until his retirement from the Air Force. (Photo by Lt. Col. Mel Hollar).



FLIGHT REPORT—Cadets Jeffrey Demchak (left) and Cadet Megan L. Lupher receive information on the progress of an airlift flight taking them from the Greater Pittsburgh International Airport to Wright-Patterson AFB, Ohio. Cadets and senior members of squadrons belonging to Pennsylvania Wing's Group 1400 were recently airlifted by the 911th Tactical Airlift Group for a weekend of activities. (Photo by 1st Lt. Frank E. Wesco).

PEOPLE . . . in The News

Northeast Region

Members of the Robert Ramsey Sq. (Rhode Island Wing) took part in a walka-thon to benefit victims of cerebral palsy recently. Members marched a distance of ten miles and agreed to donate a week's dues in addition to any amount that might be given by sponsors... During the past several months, members of the newly formed Freehold Comp. Sq. (New Jersey Wing) have been extremely busy. They have participated in several bivouacs, made a profit with their first car wash, participated in their first parade, volunteered for the New Jersey Wing drill team and taken part in a fund raising effort at the local fair.

Members of the Shrewsbury Comp. Sq. (Massachusetts Wing) assisted their local March of Dimes chapter by offering first aid and patrolling the parade route during a recent walk-a-thon... Reading Comp. Sq. 803 (Pennsylvania Wing) sent six cadets and two senior members to a radiological monitoring school recently. Those cadets attending were: George Pelter, Eric Kase, Neal Miller, Walter Chase, Jay Berringer, and William Pelter. The senior members accompanying them were Lt. Col. Charles Obold and Maj. John Aungst.

Orientation flights were given to qualified cadets of the Gen. Carl A. Spaatz Sq. (Pennsylvania Wing) recently. Those receiving flights were: Cadets Donald Grill, David Jafolla, David Krauss, Charles Staso, Karole Cellucci, Patricia Mort and William Grill ... A testimonial dinner was given in honor of Maj. George McGinnis of the Orange County Group (New York Wing) recently. The award presentation was made by Col. Richard Luria, sector commander. Maj. McGinnis has been a member of CAP for 35 years.

Middle East Region

Members of the Monticello Comp. Sq. (Virginia Wing) recently received the American Red Cross Standard First Aid Card. Those passing the course included: Capt. William Franks, 1st Lt. Paula Franks, and Cadets Phillip Hoeffer III, Robert McKeen, Mark Gammon, Scott Parker, Kaye Smith and Steve Smith. The course was taught by 1st Lt. Keith Conover... Cadet David Winkler, a member of the Martinsburg Sq. (West Virginia Wing) has been awarded a flight scholarship which will enable him to solo. He will receive flight instruction from an instructor at the Martinsburg Municipal Airport.



Cadet David Winkler, Martinsburg Comp. Sq. (West Virginia Wing) receives his flight scholarship from 1st Lt. Ralph S. Davis, squadron operations officer.

Col. Charles Suraci, of the Middle East Region staff has dedicated two plaques to two colleges in the United States. One was dedicated to Columbia Union College in Maryland and the other was dedicated to Pennsylvania Military College... First Class Petty Officer James Stratton from the Coast Guard recruiting station was the guest speaker at a meeting of the Easton Comp. Sq. (Maryland Wing). Cadets and seniors learned about life in the Coast Guard and viewed several films.

The 111th ARRS Sq. (North Carolina Wing) was again asked this year to present the color guard at the World 600 auto race in Charlotte. However, they were also requested to participate in the flag raising ceremony. This is a first for The Maryland Wing headquarters was visited recently by Brig. Gen. Paul E. Gardner, executive director of Civil Air Patrol. Outstanding cadet of the quarter for the Martinsburg Sq. (West Virginia Wing) is Todd Schyler.

Southeast Region

Hillsborough Senior Sq. (Florida Wing) participated in the Open House program at MacDill AFB in Tampa recently. Not only did members man a concession booth



Florida Wing Group 3 information officer 2nd Lt. Lois M. Bailey looks at the CAP display at the Mac Dill AFB open house.

but answered questions at a recruiting booth and static display... The Tallahassee Comp. Sq. (Florida Wing) participated in the North Florida Fair and won third place for their recruiting booth... Members of the Oldsmar Cadet Sq. (Florida Wing) participated in a softball game with a local bay area radio station recently. The game was designed to acquaint residents with the unit as well as promote the radio station. Final score: FMY 95—13, Oldsmar 12.

At a special program held recently, the Sarasota Comp. Sq. (Florida Wing) installed a new commander. 1st Lt. Dennis McCoy was named the new commander. Hillsborough Senior Sq. (Florida Wing) flew cadets from local squadrons on a training mission recently. The cadets are in training as scanners and observers to increase their skills.

North Central

Region

Nebraska Wing took home all the trophies from the 1977 North Central

Region Cadet Competition recently. This entitles them to represent the North



Nebraska Wing cadets pose with the trophies they took home from the competition.

Central Region at the National Cadet Competition at Maxwell AFB, Ala... Cadets from the Salina Comp. Sq. (Kansas Wing) recently viewed the M-60 tank. First Sgt. Larry Heim gave a tour and answered questions concerning the tank. Cadets were also able to view a simulator that is used to train tank drivers...

During a recent visit to the mayor's office in St. Louis, members of the St. Louis Group (Missouri Wing) presented a check to their local United Way... Lt. Col. Harold Lindseth, commander of the South Dakota Wing, recently presided over a two-day commander's call featuring the introduction of new staff members, a Level I training course and an awards ceremony.

Great Lakes Region

Second Lt. Mark Demmin, deputy commander of cadets for two squadrons in Illinois has been named president of the newest Air Force Association chapter in the nation. Lieutenant Demmin is the youngest president in the nation... The annual SARTEST highlighted events of Shattuck Comp. Sq. (Michigan Wing) recently. During the test, squadron commander Jerry Gilbert was cited by the Air Force evaluators as having the best ground team region wide...

Chaplain, Capt. Dwight Bradford received the Meritorious Service Award in ceremonies held at Group 3 Head-quarters, Indiana Wing. The award was presented for outstanding service within Civil Air Patrol... Capt. Gary Buckley, a member of the Lockbourne Comp. Sq. (Ohio Wing) was presented the Air Force Commendation Medal during a recent commander's call... Twenty two cadets and three senior members of Cincinnati Comp. Sq. (Ohio Wing) recently took part in an orientation flight conducted by the 302nd TAW (AFRES) stationed at Rickenbacker AFB, Ohio.

Southwest Region

Lt. Col. Robert C. Atwood, of the Texas Wing, wears three uniforms and three ranks. Two uniforms are Air Force blue; one is that of the Civil Air Patrol and the other Air Force Reserve. The third is also

blue and is that of the U.S. Coast Guard Auxiliary... Arizona Wing Liaison NCO MSgt. Bobby Scroggs recently received his Community College of the Air Force degree... Cadets of the El Paso Comp. Sq. (Texas Wing) were guests of the local chapter of the Experimental Aircraft Association at a barbeque and fly in. The barbeque was the association's way of saying thanks for the recent assistance of the squadron during the Lindbergh replica visit.

The cadets and senior members of the Thunderbird Comp. Sq. (New Mexico Wing) recently received multi-media standard first aid from instructor 1st Lt. Frank Zentner... Capt. Bertha Hanhart, commander of the Calvert High School Comp. Sq. (Texas Wing) has been named Outstanding Female Member of the Texas Wing for 1977 ... The recipient of the Luther C. Bogard Award for Senior Member of the Year in the Texas Wing is Capt. George L. Smith, commander of the Delta Comp. Sq.

Rocky Mountain Region

The Mile Hi Cadet Sq. (Colorado Wing) members are doing their part in supporting the state's pro football team during the 1977 season. They are promoting and selling the football programs before the game and several items during and after the games... Recently the Mt. Olympus Cadet Sq. (Utah Wing) won the third annual Utah Wing Drill Team Competition... North Valley Comp. Sq. (Colorado Wing) cadets recently assisted at a Walk-a-Thon sponsored by the Easter Seals Foundation. Cadets worked with the officials at the start-finish lines and at the various checkpoints along the route. Those participating were: Cadets Gregg Beary, Kathleen Beary, Debbie King, Chris Hunnel, Anton Eret, Michael Pesall and Brenda Leonhardt.

Cache Valley Comp. Sq. (Utah Wing) now has a new commander. He is Capt. Richard K. Hughes who has been in the program for seven and a half years... Eagle Rock Comp. Sq. (Idaho Wing) participated in a light bulb sale while at the same time promoting Civil Air Patrol to all the residents in their area... The Montana Wing held a Cadet Leadership School at Ft. Harrison, Montana recently. While there the cadets attended classes in basic and advanced drill, survival training, communications, staff duty analysis, basic first aid and received helicopter aviation flights from the Montana Air National Guard.

Pacific Region

Cadet Tim Browning of the Renton Comp. Sq. (Washington Wing) recently spent a weekend at Ft. Lawton, Wash., at 365th Civil Affairs. He spent his time as though he were an active Army Reservist with the unit... First Lt. Rod Scamahorn and 2nd Lt. John Neely of the Chehalis-Centralia Senior Sq. (Washington Wing) were recently promoted to captain and first lieutenant respectively at the Washington Wing Fall Conference.

General Montgomery of the Air Force Academy's Falcon Foundation recently visited Millard School in Bandon, Oregon. Cadets John Hvasta and Butch Howard were members of the rifle drill team which put on a display of innovative drill for the general... Members of the Tukwila Comp. Sq. (Washington Wing) participated in the annual Veteran's Day Parade in Auburn, Wash...

Hypothermia Means You're Cold Inside

BY LT. COL. (DR.) ROBERT J. KAUFMANN, USAF USAF Regional Hospital Maxwell Maxwell AFB, Ala.

Hypothermia is a condition in which the body core temperature falls below 95 degrees Fahrenheit because the body cannot produce enough heat to keep up with heat loss.

Under normal conditions the body core temperature is kept at an even temperature of about 99 degrees by a sensitive temperature regulating system which keeps us cool when the weather is warm and warm when the weather is cold.

This article will be confined to situations in which the environment is colder than the body.

To begin, let us make a few things clear; which, once understood, will make hypothermia and temperature regulation more comprehendible.

Heat and energy can be considered synonymous. Heat is one form of energy: lose heat, your body loses energy, and energy is necessary for life. Calories are units of measure for heat, or energy, just as inches measure length.

At 99 degrees the body has a certain amount of heat, dependent upon its size, and stored energy, which can be measured in calories—heat or energy units

If you lose heat, your body will lose energy—heat and energy can be traded. Expend energy (such as by shivering) and you produce heat, which will be ultimately lost to the colder environment, as we shall see.

How does the body lose heat (or energy)?

Basically in four ways:

1. Through radiation.

Radiation is the leading cause of heat loss in most any situation, and the head is the most efficient radiator.

At 40 degres the unprotected head can lose up to one half the body's total heat production and three-fourths at five degrees.

2. Through convection.

Moving air removes heat from the body by moving warm air next to the body. There is a warm layer of air next to our skin kept there by clothing.

This situation of moving air is responsible for the "chill factor," the more rapidly air moves the more heat or energy is lost through convection.

At 20 degrees and a 16 knot wind the chill factor is equal to minus 10 degrees with still air.

3. Through evaporation.

Through perspiration and through respiration as we breathe out warm air. When water changes from a liquid to a gas (as in evaporation) heat is required, and absorbed from the body.

4. Through conduction.

Remember how cold metal feels outdoors in cold weather? The doctor's stethescope? Water at 70 degrees? Metals feel cold because we lose heat very rapidly to metals since they are very efficient conductors of heat—away from the body in these instances.

Did you know that the thermal conductivity of water is 240 times that of air? That means wet clothing can extract or conduct heat from the body 240 times as rapidly as air!

What conditions lead to hypothermia?

Remember one does not have to be exposed to severe cold, such as an Alaskan winter. Hikers have succumbed to hypothermia in summer months with relatively mild temperatures under conditions of exhaustion, rain and inadequate clothing.

Hypothermia occurs when loss of body heat is greater than its production.

Factors involved are:

- 1. Cold—the greater the difference between body and outside temperature the more rapid the heat loss.
- 2. Wet—rain, snow, immersion, even perspiration.
- 3. Wind—which greatly increases heat loss by evaporation and convection.

4. A likely victim—unprepared or exhausted. Adequate knowledge, clothing, emergency shelter and rations would prevent most deaths from hypothermia

What are some of the signs of impending hypothermia?

1. Early, when the core temperature is still 99 to 96 degrees, the body will shiver intensely. This is nature's way of producing heat through muscle activity.

It is intended as a temporary measure only. It takes as much energy to shiver as to saw wood, and unless measures are taken to cut down on heat loss, that extra heat will just be lost.

2. Later when core temperature is between 95 and 91 degrees, shivering will become violent. Coordination is lost and speaking becomes difficult.

This is where danger is intensified, thinking becomes sluggish, judgement is impaired. One may begin to stumble, wander off the path and not know enough to seek shelter, bivouac or take other precuations to prevent heat loss.

3. Still later with core temperature between 90 and 86 degrees, shivering ceases; however, there may be occasional violent shaking or muscle contractions.

This is the body's final effort

to increase heat production for survival; but, alas, it too requires much energy compounding heat loss. At this stage one is usually irrational.

4. Later when the body temperature is between 85 and 81 degrees, contact with the environment is lost, and one becomes stuperous. Pulse and respirations are slowed.

At this stage one cannot help himself and can survive only if rescuers are on hand to administer immediate and drastic treatment. Indeed at this stage the victim may die before the rescuer even has time to build a fire!

- 5. When body temperature falls between 80 and 78 degrees, one is unconscious.
- Below 78 degrees there is failure of the cardiac and resporatory control center and death insues.

What can you do to prevent hypothermia?

Hypothermia is a killer of the unprepared. Preparation is the key to survival.

1. Be aware. Aware of the weather, your limitations, your general condition, the terrain, your equipment. Plan, whether it be an outing or a flight, be sure your hike or flight is within your personal limitations.

Carry adequate survival gear. Do you preflight adequately clothed? You won't rush your preflight if you are comfortable, and if you find yourself down, the glove liners and watch cap will be invaluable!

Stay in good physical condition, and you will be able to think clearer for a longer time.

Know where you are going; panic leads to mistakes, accidents and death. Remember cars, planes, even snowmobiles can get you farther in minutes than you can walk out alive!

2. Dress properly. Multiple layers of thin clothing protect better. Wool does not "wick" like cotton and dries from the inside keeping the body warm, even when wet.

Blue jeans and cotton are not cold weather gear. An inch of exposed cotton in rain will "wick" until most of the garment is wet!

- 3. Prevent exhaustion. The length of survival depends upon the total amount of energy at the beginning of the survival incident.
- If one has exhausted all his energy, as in hiking, he will not have any left to produce heat, and his survival time will be shortened.
- 4. Prepare by carrying emergency bivouac gear (light weight emergency camp equipment).
- 5. Eat— keep nibbling—
 remember food contains
 calories, it has energy and can
 produce heat to warm your core!
- 6. Bivouac early to conserve heat, build a fire to heat water or food. (Eating snow may keep up your fluids but consider that it takes 2,400 calories to change one ounce of ice to water at 32 degrees and another 1,100 calories to raise it to body temperature.

That's a 3,500 calorie loss for one ounce of water, a lot of food, a lot of heat lost!

7. Keep active, but more mental than physical—keep nibbling food; food is energy that produces heat. Calories do not count! Heat liquids and take them liberally. The trick is to use your brain to conserve what energy remains. Limit muscle activity and reduce heat loss.

What to do?

Even mild cases require quick and drastic treatment. We will not concern ourselves here with definitive treatment of advanced hypothermia. Suffice it to say that for conscious people in impending hypothermia, one must do two things.

- Prevent further heat loss by insulation, get out of the wind into shelter, remove wet and put on dry clothing.
- Add heat energy—warm liquids by mouth, high calorie food and apply external heat.



WALK AROUND—1st Lt. Leonard DeVall of Santa Susana Sr. Sq. 40 (California Wing) shows Cadets Greg Phillips (left) and Mark Barros part of the pilot preflight equipment walk around check before starting engines. Members of Squadron 40 work closely with the Simi Valley Cadet Sq. 59 and the G.R. Wilson Cadet Sq. 130 in teaching them about air, ground and mission base activities. (Photo by Gary R. Keenliside)